



Items of Interest



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EXCLUSIVE CONTRIBUTIONS

Complimentary Banquet Tendered to Dr. J. F. Frantz.

Recently Dr. J. F. Frantz, the president of Consolidated Dental Manufacturing Company, visited Chicago, when, much to his surprise the leading dentists of that city hastily prepared a banquet in his honor. There was very little time in which to prepare details as the doctor's visit had been totally unexpected, and the movement was an impromptu impulse, but managed by Prof. B. J. Cigrand, of the University School; Prof. H. J. Goslee, of the Chicago College, and Prof. C. M. Cattell, of the Northwestern, the dinner was not only a success, but was a most enjoyable affair, attended by many of the leading lights of Chicago. Owing to the brief notice, previous engagements compelled several to send letters regretting their inability to be present. Among those who graced the occasion were: Drs. D. B. Freeman, C. P. Pruyn, B. J. Cigrand, H. C. Cornell, T. W. Brophy, E. L. Clifford, Louis Ottofy, John S. Marshall, J. H. S. Myser, S. C. Clark, C. J. Moore, D. M. Cattell, G. A. Thomas, F. N. Brown, A. H. Murdow, I. D. Spirling, W. E. Harper, A. E. Mattison, R. B. Fuller, H. J. Goslee, G. B. Perry, J. H. Wooley, D. M. Gallic, L. P. Haskell, W. A. Stevens, R. V. Cleveland and Wm. Muller.

At eight o'clock the guests filed into the pretty banquet hall of the Leland Hotel, Drs. E. McWhenney, J. G. Reid and W. V. B. Ames acting as the reception committee. During the dinner Madam Roche rendered many popular airs on the piano. The postprandial entertainment began shortly after nine, Dr. Cigrand acting as toastmaster, and by his ready wit and repartee pleasantly filled the pauses between the regular speeches. In introducing the first speaker, he claimed that upon such an occasion it would be permissible to reverse the motto of Abraham Lincoln so that it might read: "With malice toward all and charity for none." He thought that such a course "after dinner" would be productive of more merriment, and he set an example by "telling tales" on Drs. Brophy, Pruyn, Stevens and Marshall, which caused much good humored laughter; speaking seriously he declared that the occasion was one which should be regarded as the beginning of a close relationship between dentists and manufacturers. The profession well recognizes the generous assist-

ance of the manufacturers, and it was opportune to show a mark of appreciation for the labors of the artisans; dental depots not only render service to the profession by superior excellence of surgical instruments and prosthetic appliances and materials, but they directly benefit the science and art of dentistry by releasing the busy practitioner from the manufacturing toils, thus giving the dentists time for the acquirement of increased knowledge and skill in the various departments of their vocation.

Dr. W. A. Stevens, ex-president of the Illinois State Dental Society, responded to the toast, "The Western Metropolis." He is registered among the pioneers and patriarchs of Chicago, but he is young in spirit and can be as humorous as any of the disciples of Mark Twain. He reviewed, in an interesting talk, the early history of the city, and received frequent applause while he upheld the dignity of the "Windy Town." His closing remarks were well received, stating that New York was obliged to take in the State of New Jersey and a part of Ireland to keep ahead of Chicago.

The next toast, "Dental Journalism," was to have been responded to by Dr. W. A. Harlan, editor of the popular Western Journal, *The Dental Review*. The toastmaster read the following letter of regret:

Dr. B. J. Cigrand:

Dear Doctor—The invitation to attend the banquet given in honor of Dr. J. F. Frantz has been duly received, for which please accept my thanks. I regret very much that it will be impossible for me to attend, and would be pleased to respond to the toast, "Dental Journalism," had I the opportunity of being present. I hope you will have a very pleasant evening. Yours sincerely,

A. E. HARLAN.

Dr. C. P. Pruyn responded to the toast, "The Dentist in His Office." In the course of a very witty speech he gave some sound practical advice: "The operator should early learn of the enjoyments of his patient, whether they be of a literary, sportive or other nature; the dentist should enter with spirit into the affairs which concern his patient and never attempt to attract the patient's mind to things of immediate concern to himself. By thus occupying the attention of the sufferer, dental operations can be rendered with a minimum amount of pain. The office should be free from display of emblems of our profession; the apartment should be neat and tidy and have few things representative of dentistry in sight; the office in general should approach in appearance a commodious house.

Dr. Truman W. Brophy, dean of the Chicago College of Dental Surgery, responded to the toast, "The Dentist Out of His Office," and drew a comparison between dentistry and farming (he owns a large stock farm), call-

ing attention to the great similarity. "The farmer does considerable in the way of draining; so does the dentist. The farmer spends some of his time removing stumps and roots, so does the dentist. The farmer frequently sets posts and so does the dentist; the farmer often builds bridges, and so does the dentist; the farmer is quite at home with the ducks and some of the dentists associate with quacks; and the farmer works with shovels, hatchets and hoes, and so does the dentist. In fact, whether in the office or out, I am occupied in about the self-same manner, the only difference being that farming is by far the easier." Dr. Brophy not only amused the guests with his comparisons, but he gave good advice in his concluding sentence when he said: "The dentist should be in his office but six hours a day, and the remainder of his time should be spent in a field which is of interest to him, yet foreign to dentistry."

Dr. Louis Ottofy responded to the toast, **Dr. Louis Ottofy.** "Dental Societies." His address was statistical, instructive, and full of humor. He praised the effete East for the great interest manifested in society work, and gave a history of the origin of dental gatherings. He showed how the various societies strive to awaken the busy dentist to the welfare of the profession, and added that although these societies work in different directions, having an individuality of their own, they nevertheless materially assist in causing great progress in all departments of dentistry.

Dr. John S. Marshall, M. D., emeritus professor of oral surgery in Northwestern University Dental School, and veteran in the cause, responded to the toast, "Days Gone By," and all enjoyed his personal reminiscences of the days "Immediately After the War." When he was initiated into the mysteries of the science of dentistry at the Syracuse University, there was not that liberality of spirit which manifests itself at this banquet. "Dentists," he said, "guarded the secrets of the art with a jealous eye, and it was a common sight to behold the sign 'Keep Out' nailed over the door of the dental laboratory." He told how the progress of dentistry was retarded prior to the days of dental organizations, and in almost eloquent language portrayed the influence of dental gatherings: "be they general or special, banquet or congress, these are the proper channels through which can be interchanged the progressive thought of the day. Conservativeness characterized the dentists of the old school, while liberality is the nature of the new; and this grand result has been brought about by the dental societies and the colleges, and these latter institutions have done considerable to advance the tone of the dental profession. In the days when I entered the calling, the title of M.D., as connected with that of D.D.S., evoked derision and scorn, and I am pleased to note

that there is at present a fraternal feeling existing between the practitioners of medicine and those of the several specialties." The evening was made joyous by the innumerable stories, and it naturally fell to the lot of Dr. Marshall to add to the merriment. His contribution was received with loud cheers. The story related to a young graduate who boasted to a farmer that he attended two colleges and had acquired a "double-degree," whereupon the farmer added, "We once had a calf that sucked from two cows, but after all he was but a common steer."

In the absence of Dr. C. N. Johnson, the toastmaster called on Dr. E. L. Clifford to respond to the toast, "Needed Reforms." He started his remarks by saying that one of the needed reforms which he hoped would be inaugurated related to calling on guests to respond to toasts when they were unprepared, and he hoped to demonstrate to the satisfaction of all present that such a reform was indeed necessary. But the doctor did so well, and introduced so many new and original ideas in his brief talk, that the force of his introductory remarks was lost.

Mr. H. C. Cornell, manager of the Chicago branch of the Consolidated Dental Manufacturing Company, answered to the toast, "Our Guest of Honor," and briefly reviewed the accomplishments of Dr. J. F. Frantz in business, closing his address by saying: "Dr. Frantz, although a modest man from New York, is not unlike the gentler sex, he can speak for himself."

The toastmaster in calling upon Dr. Frantz to speak of "Dental Depots," took occasion to criticise the statement of the previous speaker, saying that: "I fail to see how Dr. Frantz can be introduced to us as a 'modest man,' when it is generally known and can be readily proven that the teeth of Dr. Frantz have been in touch, hundreds of times, with the lips of fair women in all quarters of the land."

Dr. Frantz made an address which has won for him many friends, and all will remember him as a plain, unassuming and genial person. He dwelt at considerable length on his "jolly surprise," and stated that he could blame none other than Dr. Cigrand for having thus caught a New Yorker napping; but he hoped to be able in some manner to voice his appreciativeness at so happy an occasion. He spoke of the many surprises which Chicago had showered upon him, calling especial attention to the superb equipments of the Northwestern University Dental School and the Chicago College of Dental Surgery. These institutions are indeed deserving of commendation, and are the equal, if not the superior, of any like institutions in the East. He said he had learned an object lesson

regarding the West and her great metropolis, and knew the lesson would bring forth good fruit, in testimony of which he promised that the *ITEMS OF INTEREST* would give more attention to affairs pertaining to dental progress in the Mississippi Valley. As regards dental depots, he wished to be remembered as saying that all the great dental manufacturing companies feel the want of a close companionship with the progressive practitioners. Much good would result if the dentists and the manufacturers were brought together to discuss appliances necessary to perform perfect dental operations; as it is now the manufacturers are often obliged to rely on the knowledge of the artisans employed for the effective improvements of the many materials, etc., placed before the trade. In closing he stated that he had been informed that the Chicago Dental Society had appointed a committee whose purpose it was to reconstruct the present sizes, shapes and forms of the artificial teeth; that the colors of the present dental substitutes, as well as their general outlines, did not suit the wishes of the profession. He said he was certain the house which he had the pleasure of representing, would be eager to labor in conjunction with this important committee in the hope of placing before the profession an "ideal artificial tooth."

Dr. Frantz being obliged to leave for the East on the 11:40 train, his talk was limited to fifteen minutes, during which time he was frequently interrupted by hearty applause.

CHICAGO.

Ancient Dentistry.

Answer to Dr. William H. Trueman's Paper.

By F. K. LEDYARD, San Jose, Cal.

I read with a great deal of interest Dr. Trueman's criticism of my paper which appeared in the October issue of the *ITEMS*. In the December issue he speaks of it as "a valuable contribution to a much neglected subject, and well merits a careful and retentive reading. As found in the *ITEMS* it contains, however, a few inaccuracies, due in part to the writer having mistaken romance for history, and having neglected to verify his authorities."

In reply, I would like to say, I feel it quite a compliment to my paper to have so able a man as Dr. Trueman take up its discussion. To a casual reader it would appear that his personal opinions would stand as a correction. In this the article would perhaps do me an injustice.

However this may be, I am duly gratified for his kind remarks in my behalf, but do not feel that he should do Dr. Cigrand an injustice through possibly an error of mine. I certainly feel that Dr. Cigrand has given to the profession a most valuable work, having labored nine years in its production. It is fully supplied with references, and is a compiled history of facts, for which we should be duly grateful.

On page 750, quoting from Dr. Cigrand's "History of Dental Prosthesis," I speak of "Dr. Mease," in the book it will be found "Mesue." On the same page "Ambrose Parr" should have read "Ambroise Paré," and 1759 should be 1579. Also, on page 745, Fig. 3 should have been marked as coming from Dr. Cigrand's book; also Fig. 18. I find a part of this is due to the much abused "printers' devil," but gladly make these corrections, as it is certainly due the author.

On page 905, Dr. Trueman says: "I am in error in supposing the denture represented in Fig. 4 must have been supported by some kind of spring, from the fact of his having seen a man 'eat corn off a cob, with gold and silver dentures shaped precisely like that, worn without a spring of any kind,' etc., etc. Now that may all be true, but it does not alter the fact that I believe this plate to be just what I stated. It was worn and supported by a spring of some kind, but not the spiral one invented by Chemant in 1787. The plate plainly shows this, and further I also believe the same kind of spring was used in connection with the small right hand cut in Fig. 7, showing three lower molars; neither of these were show cases.

**Introduction
of Spiral
Springs.**

In a pamphlet published by M. Duboise De Chemant, bearing date 1797, in speaking of the spiral spring invented by him, he says: "I shall now proceed to speak of the mechanism, and of the springs made use of to support the teeth, sets of teeth, plates, etc., which I have likewise invented. It was not enough to have at my disposal a solid matter and which could be molded into any proper form. The springs made use of were defective, therefore I have invented others, which are both solid and flexible; they are adapted to obey without any inconvenience all the motions of the jaws, even that of rotation, which other artists have never been able to effect." This gained for him the approbation of the Academy of Science, of Paris, which in its report says, after dwelling on the excellence of his mineral plates: "These whole sets are put in motion by means of springs of M. De Chemant's invention, which are very different from those used heretofore, and which not only separate the parts when the jaws are deflected, but also allow the side motion. These springs are applied to both sets, even to the upper ones in a manner as simple as it is ingenious, and

single, double or treble teeth fit with great facility, because M. De Chemant has found means of boring his paste so as to place pins in them and to make any slides he pleases." Dated Paris, June 21, 1789.

In drawing a parallel between animal and mineral substances, he further says:

"Fifthly, Teeth of animal substances being subject to corruption and rottenness, get loose from their piers, because the holes that serve to fix them become larger and the teeth fall out and the pivot remains at the root, etc.

"Sixthly, According to my method, the teeth supplied by gold pivots can never get loose from them because their pivots are riveted and soldered to the paste itself, as if they were the same body, with which they continue equally firm."

The crowns here spoken of were probably not put on the market at that time, but this shows there were crowns made as early as 1789.

On page 907, Dr. Trueman says: "I am strongly impressed that Figs. 14 and 15 are of French not English make, unless they are of very recent date."

I stated that Fig. 15 was "English work of comparatively recent date," but did not describe Fig. 14. The tooth in that case is the old split bean of French make. They are like those shown in Fig. 13, save the one in the upper right hand corner, which is a pivot tooth, probably of the same date; of this I cannot be positive. It was presented to me by Dr. W. C. Barrett, of Buffalo, one who has always taken a great interest in antiquities of this kind, and who furnished me with plate Fig. 2. Dr. Barrett, I think, will verify my statement in regard to these cases. They are all now in his possession.



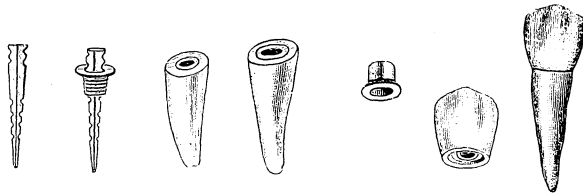
A New Porcelain Crown Pin and Root-seal.

By ROBERT EUGENE PAYNE, D.D.S., M.D., New York.

A porcelain crown and root canal seal without a band, that will meet all conditions of roots, and which may be removed at any time, is a desideratum which many practitioners will appreciate.

Round pins, small pins, and pins baked in the porcelain are objectionable, for the reason that they will turn, and in badly decayed roots will wash out.

The root canal seal and its thin flange is intended to overcome as many of these conditions as possible without banding. Many roots cannot be banded successfully. The accompanying illustrations of crown, root canal, seal and pin, may be described as follows:



The pin is in three parts. The upper section is a thin tube and flange, to be fitted in the root. The lower section is a tube and smaller flange, to be cemented in the porcelain crown with the pin, in an oval well countersunk at the top. The middle portion is a *grooved* oval pin which unites all the parts when the crown is set into the root. The porcelain crown, having no pin in the way, is more conveniently fitted. It has an oval well to receive the oval pin, and cannot turn. The upper section of the pin is a tube fitted over the pin, being a part of the pin, and is cemented in the root. It has an oval opening to receive the oval pin, and cannot turn.

After the crown is fitted to the root, the root seal cemented in place, and the pin cemented in the crown, they may be united with cement, chlora-percha, copal varnish or soft temporary stopping.

Some operators do not practice immediate root filling, and prefer to treat an abscess through the root canal. The crown may be removed at any time for this purpose, or to change it for any other color or size, or to alter its position. Many operators prefer setting crowns with copal varnish, chlora-percha and gutta percha. This crown may be removed by simply heating the tip of the porcelain, as follows:

Take a small medicine dropper, put a white cotton string or wick in it, cut it off even with the tapering glass end, then draw in a few drops of alcohol and light it. You have a miniature alcohol lamp, with a flame about the size of a pin's head. Heat the tip of the tooth and remove it.

Why should it be removed? There may be a latent abscess that must find vent. You may prefer to give it vent through the tooth. There may be a fistula to heal. After setting, the crown may not be in position to suit the patient or operator. The tooth may not be of the right size or color. It may get broken. If the crown is cemented, it is too late to correct these difficulties. Practitioners living at a distance from a dental depot, who may wish to change the crown for one more suitable, will appreciate these advantages.

Many roots are decayed to such an extent that the cement will wash out. The root seal will overcome this condition, restoring the canal or tube in which the pin fits accurately to approximately the normal condition.

The pin is out of the way while fitting the crown. Out of the mouth the pin may be bent to meet the requirements of the case. When fitted in the tube, or root seal, it is rigid, being reinforced and strengthened. It is grooved to permit the surplus chlora-percha, cement or copal varnish to escape, and prevent the formation of air cushions, pressure and pain. It cannot be washed out, because the root is sealed, and may be set with gutta percha, which is not soluble, and will not disintegrate.

The well in the crown that receives the pin, while being narrow at the neck, will admit of the crown being set in any position without bending the pin to any great extent. There is body enough of cement to securely hold the pin, and this is made doubly secure by being received in a metal cup or tube in the crown. The gutta percha also protects this. It requires no special trephines, or anything not found in everyday practice.

The different parts are all stamped up by machinery, *two sizes of root canal seals being made for each pin*. The tubes or root seals are made up of thin 34-gauge platinoid, platinum 22-carat gold, and German silver gold plated. The root seal may be countersunk in the root or burnished closely, being very thin. The countersink in the porcelain crown will receive this thin flange if burnished to the root and cannot in any way interfere with the close adaptation of the crown to the root.

The mechanical adaptation is intended to be so perfect that when once fitted there is no danger of getting the crown out of position while cementing it, and thus you avoid a shelf above the crown where it joins the root.

A Porcelain-Faced Crown for Bicuspid or Molar Teeth.

By HENRY PEACH, M.D., D.D.S., Sydney, Australia.

We have so often to deplore the appearance of gold caps in the mouths of our patients, in the bicuspid and molar regions, that any method giving promise of better results should be worth describing. An æsthetic, strong and simply made crown may be devised by using the ordinary pin vulcanite teeth, Fig. 1, and binding them around the base with a strip of 22-K. gold. It also makes a most useful attachment for a bridge, the porcelain only being visible—of sufficient strength, easily articulated, and, perhaps of more importance, it can be made at the chair, which is impossible in attachments whose cusps have to be swaged.

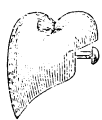


FIG. 1.



FIG. 2.



FIG. 3.

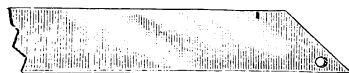


FIG. 4.

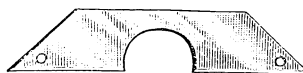


FIG. 5.

Where it is to be used as an attachment, or part of a bridge, plain rubber teeth are selected, suitable for the case, and prepared, by grinding from their palatal side in such a way as to make that surface as flat as possible, Fig. 2. The heads of the pins are then squeezed out to permit of their passing through holes to be afterwards punched in the gold.

A strip of 22-K. gold 33 g. and about half an inch wide is prepared by cutting its end diagonally, and the corner punched for the reception of the first pin, Fig. 4, which is then placed in position and the gold carried around and over the buccal surface of the tooth until the other pin marks a place in the strip. The circumference is thus also ascertained and marked, and before removing, a festoon is also marked out on the buccal surface to show the amount of porcelain it is desirable to expose. The gold is then removed and cut as marked, and the second pin hole punched. It will then have the form shown in Fig. 5.

The gold is now replaced and thoroughly burnished over the surfaces of the tooth, the pins being first drawn tightly together. This jacket will now be found longer than the tooth and uneven, and the square nose pliers will be required to draw it down yet tighter, and to squeeze its edges well together around the cervical edge.

All excess may now be cut away, and the tooth rolled up in a piece of asbestos fibre rope, exposing only the joints of the gold on the palatal surface and cervical edge. A little borax and solder flowed over the pins and all the joints, and the tooth is complete to be set up in the bridge in the ordinary way. Fig. 3.

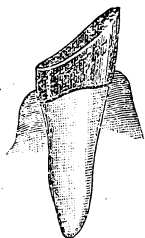


FIG. 6.

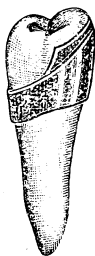


FIG. 7.

Where it is to be used as a single crown, or as an abutment for a bridge, the root should be well ground down on the buccal side, and a band prepared for it as if for a telescope crown. This band should then be cut away on its upper buccal surface—to allow of the insertion of the porcelain tooth—but left long on the palatal. A suitable tooth is then selected and prepared as before, and carefully pressed into position in the band while on the root—band and tooth are now removed, rolled in asbestos fibre rope and soldered together, inequalities between being filled with a little gold foil before soldering. Figs. 6 and 7.



Aesthetic Bridge Work.

By ALLISON R. LAWSHE, D.D.S., Trenton, N. J.

In a paper read at the ITEMS OF INTEREST Mountain Meeting last summer entitled, "A System of Removable Bridge Substitution, Using Sound Teeth, Cavities and Roots as Abutments," I championed the cause of that snare and delusion, the "window-crown," and I now offer one or two ideas which I hope will afford not merely "æsthetic" results, but strength and durability as well.

Fig. 1 shows a plaster model with the superior right central incisor missing and the teeth which are to be used as abutments sound with the exception of the artificial cavities aa, which are made oblong as shown,

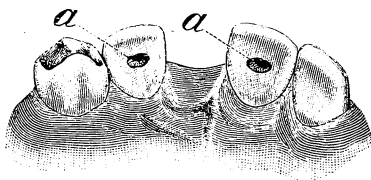


Fig. 1.

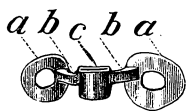


Fig. 2.

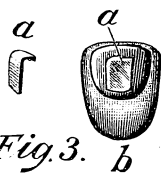


Fig. 3.



Fig. 4.

with decided undercuts along their sides (not ends). Fig. 2 is the anchor fixture (somewhat like Dr. Litch's) made for this case, which consists of two stay-plates aa, made of 32 gauge annealed platinum plate perfectly swaged upon a fusible metal die with a small silk bag of "mustard seed" shot and a riveting hammer; the bars bb, each made of two pieces of 20 gauge iridio-platinum wire; and the slot c, made by bending a small sheet of platinum plate around the post a, Fig. 3.

Fig. 3, b, is a back view of the "dummy" with the curved end of the post a soldered to its "backing." These parts are made separately and assembled in this manner:

The stay-plates are placed in position upon the plaster model (made from an accurate plaster impression, of course), the "dummy" with its

post already soldered in position is placed as you desire it, the slot is slid over the post and the wires which are to form the bars of connection are placed where wanted; the two stay-plates, wires and slot are waxed together with hard wax flux, cooled, the pieces removed from the model, the "dummy" separated carefully by drawing the post out of the slot, the fixture dropped upon some soft investment, the slot filled with the soft investment to keep out the solder, and all parts united with solder—

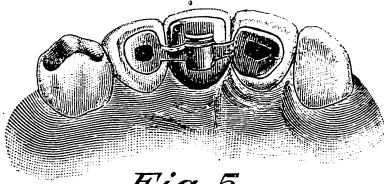


Fig. 5.

the seam of the slot closed, and the stay-plates and slot covered for strength. This done, remove the fixture from the investment, turn over and cover the other side of the slot with a lower grade of solder.

In Fig. 4, at aa, are small rivets each made by soldering together two 24 gauge round platinum wires with pure gold.

To fix the appliance in the mouth, adjust the rubber-dam, place Fig. 2 in position, mark with a pencil on the teeth through the holes in the stay-plates; readjust the fixture, slip the artificial substitute into place

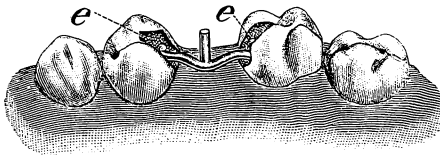


Fig. 6.

to make certain before proceeding further that the two parts bear the proper relation to each other and to the natural teeth, and if so, remove the appliance and the tooth from the appliance. Now wash the stay-plates and the palatal surfaces of the abutting teeth with chloroform, melt hard wax upon the latter, warm the stay-plates, press the fixture to place, chill it with alcohol while held firmly in position, and remove the excess of wax—particularly what was squeezed into the cavities.

The next and last step is to varnish the cavities with a non-conducting varnish, such as chloro-balsam, insert the broad end of one of the

rivets aa, Fig. 4, into one of them and turn it so that the undercuts along the sides shall catch the rivet and prevent its removal without further turning, and fill the cavity with gold, special care being taken to pack the foil thoroughly around the rivet.

The cavity full and rivet anchored securely, the projecting ends of the latter are spread, as shown at bb, Fig. 4, and the packing of the foil continued until these ends and a large part of the stay-plate of the tooth are covered, when it is ready to be burnished and polished. The other cavity and rivet are treated in a similar manner. Fig. 5 is a back view of the bridge after it is finished and adjusted to the teeth. When viewed from the front, no gold is seen.

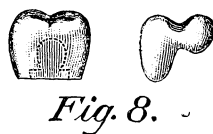


Fig. 6 shows the loss of a second bicuspid. The cavities ee (natural or artificial), are for the reception of the bar Fig. 7, a, (top view) and b (side view). This bar, which is made from No. 17 or 18 gauge round iridio-platinum wire, has an upright portion (shown at b) of the same or a larger gauge soldered to it with pure gold, and two short end pieces (shown at a), also attached with pure gold.

Fig. 8, a, is an ordinary Davis bicuspid crown, and b, the same after being ground and a groove cut on the under surface and continued on each approximal surface to receive the bar Fig. 7.

After anchoring the bar securely into the cavities with gold foil, the crown is cemented to it with oxy-phosphate of zinc, or, if preferred detachable, with gutta percha. This bridge is not visibly artificial.

Adjustment of Logan Crown.

By GEORGE A. HARPER, D.D.S., Bonham, Tex.

This may be an old method of adjusting the crown, but it is new to me, and as it may not be known by all, I submit it for consideration, claiming for it the merit of possessing easy adaptability, strength and durability. Every deficiency in the abutment, I believe, is overcome; the end of the root is doubly braced inside and out, gaining for it strength to resist the pressure the crown necessarily brings to bear.

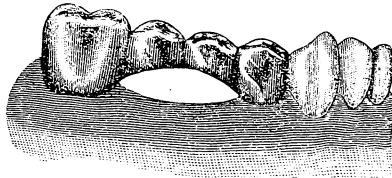
EXCLUSIVE CONTRIBUTIONS

The root for crowning should be trimmed as desired, beveling the canal a little at the end; take an impression (I use a cartridge shell); from it make a die and counter-die; swage a piece of gold between them, put on root and burnish close. This will form a ferrule, protecting the entire end of root. Leaving the cap on root, take the crown and burnish over its end a piece of gold to fit perfectly as a cap; now put soft wax over it and adjust to root, placing the crown in exact position; let wax harden, remove, trim as you would have it look when finished, remove both caps from crown, invest and flow solder in place of the wax; place on crown and soft solder to pin, polish, and crown is ready for adjustment—perfect in all points.

An All Gold Arched Bridge.

By S. H. ROFF, D.D.S., Cincinnati, O.

The piece herewith illustrated, has been worn for six months—giving the greatest satisfaction—greater satisfaction, the lady declares, than any piece she has ever worn, and she has had several.



The ends striven for in posterior bridges, viz.: strong masticating surfaces and perfect cleanliness are here obtained.

The arch has as a base a strip of gold, the cusps being on top, and the intermediate spaces filled with gold solder.

The fluids of the mouth, permitted to wash back and forth, keep the bridge perfectly clean.

Porcelain facings, which are rarely seen when on a bridge in the posterior portion of the lower jaw, are, in these cases, only an annoyance, serving to catch food debris. They add neither beauty nor strength to such a piece, and this bridge has demonstrated that it is better to omit them when a masticating surface and cleanliness are the only points striven for.

Corner Gold Fillings in Porcelain-faced Crowns.

By DR. G. W. TURNER, Savanna, Ill.

A corner of gold is often desirable, to relieve the monotony, or false appearance, resulting from crowning several of the anterior teeth. The writer has found the following method very satisfactory:

After having ground the facing to its proper position, slightly bevel the cutting edge on the lingual surface; burnish a backing of 22 K. No. 30 gold plate well to place, allowing it to extend well over the cutting edge. Mark the facing to the extent of the filling desired as in Fig. 1.

Remove backing and grind away corner to extent marked; (Fig. 2). A second backing (Fig. 3) is then burnished to place, extending slightly above labial surface. After painting the backings with borax, place the



Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.

first backing over the second and stick them together by filling in corner with hard wax. Remove the backings intact, invest and wash out wax.

In the matrix formed by the two backings, place small pieces of 22 K. scrap gold, and flow over them 20 K. solder, flush with backings. Care should be taken not to burn or draw the backings out of position.

Slightly bevel the lingual surface of the incised corner that the contraction may not fracture the facing, but serve to draw the filling to a more perfect contact. After placing backing (Fig. 4) on facing, bend down the pins, articulate and invest, solder in the ordinary way with 18 K. solder. Dress the filling down with a fine file, filling from cutting edge toward neck of tooth. Polish with disk and lathe.

The result (Fig. 5) will be highly gratifying, for the small amount of labor expended. The same method can be applied with a plain rubber tooth where the effect is desired in an upper denture.

A Porcelain-faced Gold Crown: Half Caps in Bridge Work.

By CHARLOTTE E. BENTON, D.D.S., New York.

For a bicuspid crown, where there is considerable of the crown left, I like a crown made in this manner.

Make a band of suitable width; place the soldered side to the front; form the cusps; but do not fill the buccal cusp with solder; bend



Fig. I.

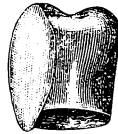


Fig. II.

the buccal end down slightly; and solder to the band only along the palatal side as in Fig. I; place the piece upon the root and direct the patient to bite down squarely and fully upon a piece of warm modelling compound; remove from the mouth when cool; pour the double impression and place in an articulator. Cut out the face of the band suitably.

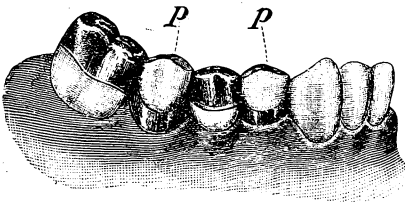


Fig. III.



Fig. IV.

Cut sufficient plaster from the inside of the band to wax the facing to place easily; back up the facing selected, invest and solder. It is a strong and easily made crown.

Fig. 2 shows the finished work. No gold is visible, as the tooth facing comes in contact with the beveled face of the root. A close adjustment may be obtained by trimming the cast so as to place the facing high enough to permit a little grinding to place when finished.

When alternate teeth are missing in the mouth, I like a bridge made with half caps of gold for the teeth, and the missing ones replaced by

banding pinless rubber teeth accurately, festooning the lower edge of the band to fit the gum, and soldering each to a base. After the half caps are made, an impression in plaster should be taken with the caps in place. The adjustment of the banded teeth to the gum is made upon this cast. After the proper occlusion is obtained, and the bases soldered, the whole is waxed to position, the teeth removed and the parts invested and soldered. Then the porcelains are cemented to their respective places, and the piece set in the arch.

Fig. 3 shows a practical case, and Fig. 4 a side view of one tooth. The band is allowed to extend to the cutting edge on the lingual side for greater strength.

So far as my experience goes, no harm arises from a well fitting cap covering only half the length of the tooth, and it seems to me much better practice to use them than to mutilate a living tooth or suffer the absence of needed teeth.

Gold Cusps for Porcelain Teeth.

By CLARENCE J. HAND, D.D.S., Romeo, Mich.

This method is confined to the bicuspsids and molars, and can be used either in crown or bridge work. Not only is there greater strength, but the changing of color in porcelain is entirely obviated. Less solder, less work, and a far more sightly piece of work constructed.



FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.



FIG. 5.

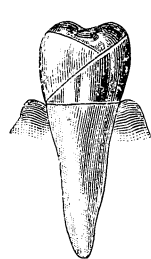


FIG. 6.

Instead of the usual facing, I use the saddle back tooth (Fig. 1), which has a crescent form. Select one that will reach from the gum, or root, to the occluding tooth. Press the coronal portion into moldine about one-eighth of an inch; make die and counter-die of Mellotte's metal and swage cap of pure gold. After ascertaining by trial that the cap is right size, etc., grind the tooth as in Fig. 2, being careful to have tooth smooth. Adjust backing of either platinum or pure gold to the crescent portion, burnishing down to a perfect fit, and secure. I slit the pins and

turn down upon the backing. Now adjust pure gold to the flattened coronal portion and tack to the backing with 22 K. solder. Let the gold project beyond the tooth a little at buccal wall so that it may be burnished down at this point, which will make the finishing easier and produce a better appearance.

Fill the cap with wax and adjust to tooth for correct bite, only being careful to have the cap touch gold at buccal point. It is surprising how great a range of bite is given by this method. After securing the correct bite, flow a little wax on crescent portion; invest, and when hard, you will find on removing wax that you have an opening between the cap and flat piece on top of tooth in which to flow 20 K. solder, with which also cover the crescent portion, the result being as in Fig. 3.

The backing and coronal pieces cover all vulnerable parts of the dummy or crown, and thus lessen breakage.

If patient objects to the display of gold, and some do, after securing the die and counter-die, grind the inner cusp or cusps off as in Fig. 4, being careful to bevel toward the inside, in order that you secure more retentive shape. Fit backing and piece to cut out portion, tack, adjust cap and solder (Fig. 5). The same procedure is used in crowning, only fitting a cap to the root and waxing all together and soldering (Fig. 6).

A Method of Crowning Roots Decayed Below the Gum Margin.

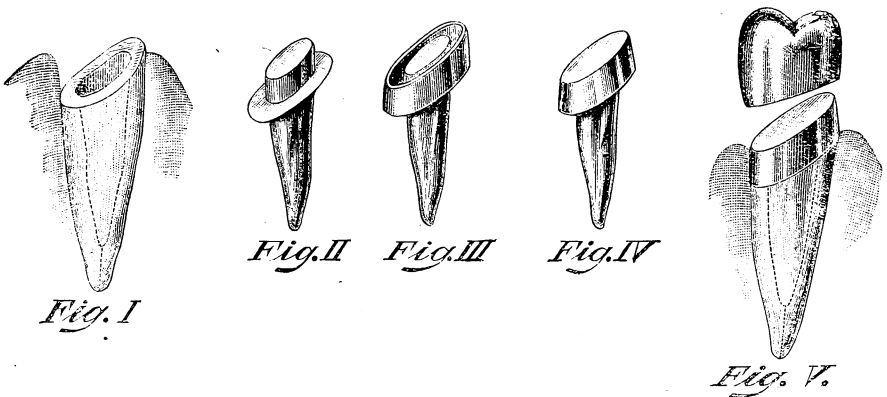
By R. OTTOLENGUI, M.D.S., New York.

It not infrequently occurs that an otherwise healthy root may be decayed so that one or both sides being below the gum margin, the application of a band crown becomes difficult, if not seemingly impossible. It may also be found that the pulp canal has been so enlarged by caries that when utilizing a pin of ordinary size, so much cement is required, that the union cannot be considered permanent. Such a condition is shown in Fig. 1 where we see a bicuspid root decayed below the gum line at the buccal aspect, the dotted line indicating the pulp canal enlarged by caries.

Such cases have been treated by first filling with amalgam, allowing this filling, as far as possible, to restore the original contour of the root; the difficulty in this process lies in the danger of disturbance before the amalgam may have had time to set hard.

The following method obviates all uncertainties and offers a means of accomplishing the desired end accurately and permanently.

First a properly fitting pin should be constructed by a method, devised I believe by Dr. F. T. Van Woert. A soft pine stick is trimmed to a shape approximately fitting the canal. This will be found to be easily accomplished. This stick is next wrapped with thin soft platinum, the edges slightly overlapping. The stick covered with the platinum is pressed into the root, thus obtaining a sufficiently close adaptation of the platinum to the sides of the canal. The platinum is then withdrawn, removed from the stick, and made solid by melting into it scraps of clasp gold. If special rigidity is required, drop in first a Logan crown pin, or a similar piece of iridio-platinum, and then flow the gold between this and the outer layer of platinum. This pin will fit the root so that a



minimum quantity of cement will be required for its retention, and of course "the less cement the stronger the joint." The next step will be to cut a piece of soft platinum plate, not too thin, to the general shape of the end of the root, and carefully make a slit in it for the passage of the pin. The pin is passed part way into this slit and then the two carried to the end of the root, when the pin is slowly pressed into the canal, gradually forcing its passage through the soft platinum, so that when fully in place it may be removed, bringing with it the platinum in proper relation for soldering the two together. This is accomplished with a small bit of twenty-two karat solder dropped on the pin near the cap piece and the two held over a Bunsen burner. The pin and cap being thus united, they are to be returned to the root. The cap is next trimmed so as to have exactly the proper circumferential shape, and is burnished tight against the root end. To prevent change of shape, more solder is next flowed over the cap so as to stiffen it. The pin with cap attached is seen in Fig. 2. A thin ribbon of platinum is then wrapped around

the circumference of the cap so as to form a cup, as seen in Fig. 3. This is then invested and filled with twenty karat gold, after which the platinum is ground off along the sides, which are then beveled, the final cap being shown in Fig. 4. When in place on the root the result furnishes a properly beveled end for the root, suitable for the reception of a crown. The general relation is shown in Fig. 5.

Further procedure is simple and affords opportunity for accuracy. The solid cap is placed on the root and an impression taken in plaster. The cap is removed, placed in the impression and when the model is made, the operator has a solid gold tooth end over which to fit his crown. For articulating-models, it will be best to take an impression of the opposing teeth rather than to depend upon a wax bite.

To place the crown in the mouth, the cap should be attached to the root first, and the crown placed after the first cement shall have had time to become hard.

For the anterior teeth, where it is desired to use a porcelain-faced band crown, after forming the platinum to the shape of the root canal merely close the lateral seam by running solder over it; then proceed as before. This will give the solid cap, having, however, the pin part hollow, for the reception of the pin which is to be attached to the crown itself. Where the canal is normal in size, use a square iridio-platinum wire for the pin of the crown, and form a square tube to telescope over it, and then use this tube as the pin of the cap for the end of the tooth.





The Stomatologist and His Stomata.

By B. HOLLY SMITH, M.D., D.D.S., Baltimore, Md.

Read before New Jersey State Dental Society, July, 1897.

The relation which professional men sustain to their field of work must ever be a topic of absorbing interest, and one whose discussion, we hope, will gradually establish uniform responsibilities which must be assumed by those who desire to claim a place of respectability in such professions. It cannot be disputed that while much has been said and written upon this subject, there does not exist in our own profession a clear conception as to the limit or extent of responsibility which should be assumed by the dentist.

This is simply the result of youth, and is in no sense due to individual lack in the leaders and teachers of dental thought. Dentistry as a profession, has not had time to establish in the minds of its followers, the finer distinctions between what is essential and what is superfluous, nor to develop in the public mind a cordial confidence and becoming subordination.

We must acknowledge, however, that wonderful progress has been made; especially is this noticeable in the birth and growth in the last few years, of a sympathy, respect and deference evidenced by the more progressive members of the older profession of medicine for the dentist. The assumption of absolute authority by the medical men over diseases having their origin in the oral cavity, is no longer the rule, but these are frequently referred with courtesy to the dentist. When we consider the intimate relation sustained by the physician to the patient, the awe, the reverence, the almost holy respect entertained for the judgment and advice of him who arrests the progress of disease, and defers the approach of the pale messenger, we can better appreciate what a factor this influence may become in the adjustment of the problem under consideration.

It is in no sense the object of the author to advocate the extension of our specialty into the domain of general medicine, but simply to call attention to what he considers the neglect of some minor details.

**Importance
of Oral
Prophylaxis.**

Let the questions be asked: to what extent is the dentist responsible for the hygiene of the oral cavity? and, what conscientious systematic effort is put forth to improve it? The fact is that if we expect or hope to take first rank among the professions, prophets and teachers must come from our ranks whose lives and untiring efforts shall be directed to the development of a system of prophylaxis.

The fact that hope of direct remuneration in this field of labor does not at present exist, should not act as a bar or discouragement, since unselfish work for humanity must always look for its reward in the gratitude of our fellow man, and the esteem and reverence of our co-laborers. Wonderful achievements have been wrought in the past for such incentives and will continue to be. The patient enduring toil of the noble army of bacteriologists is constantly encouraged by fruitful evidences of progress; let their number be added to yearly from the cultured young men who are entering our profession, and let us who have no talent for this work, at least do what we can to encourage it. Let us record our approval and sympathy, and we may yet hear the glad "Eureka" of a dental Pasteur or Koch.

Till then let us survey the fields dispassionately and see how many of our prerogatives are absorbed by the department storekeeper, who advertises on certain days, special brands of tooth powder at great reduction; the pharmacist who promises fragrant breath and pearly teeth, and the street vender of tooth brushes and tooth picks, whose like have been sold for a century without one note of warning having been sounded against them.

It is not advocated that a dentist should become a merchant, but it is his duty to know what means are used by his patients to preserve their dental organs. He should be empowered to order by prescription such a tooth brush as he thinks the mouth requires, and not leave such matters to accident or caprice. No powder or mouth wash should be used which is not prescribed by the dentist.

I doubt if there be a practitioner within the membership of this society who has not seen evidences of positive and irreparable damage done by improper brushes. Brushes are exhibited everywhere whose use even lightly would inevitably result in harm; they could not be used even upon the fingers persistently without causing inflammation and tissue destruction, and yet our patients are not warned against them. Nostrums,

pastes, mouth washes, etc., are manufactured and shipped to our larger cities by the car load; is the key turned against them even in our own households? Wooden tooth picks are found in all hotels and bars and in many private families; could we not recommend a less harmful substitute? What happens in the interproximate space after a thorough gouging with these?

These questions, gentlemen, are offered in the hope that their discussion may evolve a consensus of opinion which shall be a guide for action.

Electrical Osmosis.

DANIEL FREMONT MCGRAW.

Read before the New Jersey State Dental Society, July, 1897.

It is with a feeling of the greatest pleasure and honor that I address you from my far away California home. If there is one new thought or suggestion that in any way will help the gentlemen of this society, or the dental profession of the world at large in this subject that is of such profound interest to us all, I shall be more than repaid. "A rose by any other name will smell as sweet," and whether we call it electrical obtunding of sensitive dentine, as your assayer suggested in his articles written in 1888 and 1889, or cataphoresis, as suggested by Dr. W. J. Morton in June *Cosmos* of 1895, or electrical osmosis, the term used by Dr. Gillette in his very able article, delivered before the New York Institute of Stomatology in November, 1895, it matters not. From the time of publishing our first article in the *Dental Review* in 1889, up to Dr. Morton's article in 1895, there was positive silence upon this subject in our dental periodicals; but that interest was felt by some practitioners in the subject we were not left in doubt, for at intervals during that time we were in receipt of letters from dentists in different parts of the United States, asking questions upon this subject. In every instance the writers signified that they were working upon the same lines as put forth in the article in the *Review*, and the results accomplished were satisfactory, or not, as the ability of the operators permitted them to carry out the details in their experiments as fully set forth in that article.

After a careful study of the terminology of the terms used we are

inclined to accept Dr. Gillette's suggestion, and in this article will use "Electrical Osmosis," as being more scientifically correct.

In order that you may thoroughly understand our position and also use it for comparative purposes in reading the articles of subsequent discoverers and investigators, we will quote the entire article as read before the Chicago Dental Club and published in the *Dental Review* of February, 1889:

"This method that we shall present to you at this meeting, to gain insensibility in teeth, is the following:

"To a twelve per cent. solution of cocaine add an equal amount of absolute alcohol, making a six per cent. solution of cocaine in alcohol. In connection with this I use the galvanic current, varying the power as the needs of each case may indicate. The method of application is as follows:

"First apply the rubber dam; wet a pledget of cotton in the solution, placing it in the cavity of the tooth, pressing the point of the positive pole onto the cotton and the negative pole, with sponge attachment thoroughly wet, to the cheek, turning on the current. Rarely will more than four cells be necessary, if the battery is in good working order.

"An application of three minutes, with an interval of three minutes, and then another three minute application are sufficient in the majority of cases, although I have occasionally to make the third application; then dry the cavity thoroughly and commence excavating. My deductions as to the physiological effects are as follows:

"The galvanic current acts as a vehicle for conducting the medicinal agents; the cocaine current anæsthetizes the odontoblastic cells and the pulp; the styptic properties of the alcohol act upon the dentinal fibrils, they being of an albuminous nature, causing contraction and increased density and firmness.

"My reasons for drawing these conclusions are these:

"I have found the most sensitive teeth can be obtunded; that after a certain period of rest sensitiveness returns, but never to that degree that existed before the application of the obtundent, therefore, I conclude that a change has taken place in the dentinal fibrils, which I maintain is due to the styptic properties of the alcohol, and not to the electrolytic action of the galvanic current. Another reason is, that a tooth in which the pulp is devitalized is a non-conductor of the electrical current. A tooth which has been extracted was subjected to a twelve-cell current of a freshly charged battery, and proved an absolute non-conductor.

"In the treatment of peri-dental inflammation we have to use a stronger current, for this reason: It is well known that a strong current will tetanize the vessels, causing a diminished flow of blood to the parts, thus lessening congestion. The same current, longer continued, will cause electrolytic decomposition. These are laws of galvanic electricity that are incontrovertible. The medicinal agents that I use in all cases of peri-dental inflammation and blind abscess are as follows:

"A saturated solution of chloride of sodium, seven ounces, tincture

of ergot, one ounce. In the chloride of sodium we have one of the constituents of the blood, where it keeps the fibrine and the albumen in solution. The tissues in an inflamed condition lack this element, which we supply artificially. In the tincture of ergot we have a drug that stimulates contraction of the blood vessels, causing anæmia. Taken together we have here a combination which decreases the flow of blood, reducing congestion, at the same time furnishing an element which is lacking and upon the presence of which normal conditions depend.

"The treatment of blind abscess requires stronger battery power, in order that we may get the full benefit of electrolysis.

"Dr. Weeks informs me that he has had remarkable success in using this method in removing pulps. My experience in this line has been exceedingly limited, having used it in only two cases. The first was partially successful, and the second was a complete success. The failure of the first I attributed to the congested condition of the pulp. I would recommend getting the pulp in a healthy condition first, as I find that in cases where we have an inflamed condition, the full anæsthetic effects are not as easily gained as where the 'pulp is normal.'"

If there is one point we wish to emphasize more than another, it is that of getting the pulp in a healthy condition before further operations take place. This is well understood by the intelligent practitioner throughout the country, and nowhere will it give more satisfactory results than in electrical osmosis.

**Position of
Electrode
Important.**

When the anode is pressed directly upon, and the current passed directly through the tooth in a straight line, we get better results. As, for instance: Placing a broad-faced anode in a large crown cavity in a lower molar, and the cathode with sponge attachment, larger than the apical divergence of the roots, directly beneath the tooth under treatment, a better result is obtained in less time than in any other position in which it can be placed. Why is this so? It is a fact, and when it is generally known, will become an axiom that a current of electricity passing through a medium which is an indifferent conductor towards another medium which is an equally good conductor as the first, will hasten to reach the good conductor and not spread out over any great area of territory unless the current is deflected by an absolute non-conductor. This can be easily demonstrated. Make a silver anode the shape of a small rubber polishing cup, dry a cavity, place a gutta percha wafer in the bottom of the cavity, attach its edges with chloroform so that there will be no chance for moisture to penetrate under the wafer. Flood the cavity with the anæsthetic, apply the cup anode over the wafer so that the edges touch the dentine angularly. Get complete electrical osmosis. Dry cavity thoroughly, remove wafer, and directly underneath

will be a zone of sensibility with a ring of insensitive dentine, corresponding with the cup anode.*

If there was any deflection of current from a straight line, this zone, completely surrounded by electrical discharges, would unquestionably be affected. Now, it is easy to see, why there is such a difference of opinion among men who are honest investigators.

Placing the cathode over and posteriorly to the distal root you will get good results upon the distal root, but no results on the mesial root; and when excavation is commenced, pain is as severe as at first; hence the operation is a failure, when, by bringing the cathode farther forward toward the front of the maxilla, so that the apices of the roots are within the circle of attraction of the cathode, each root carrying its full quota of medicinal electricity, perfect results must follow.

Particularly is this noticeable in denuding these teeth in preparation for crown work. As you approach the territory of acute sensitiveness between the enamel and dentine all efforts are rendered futile, unless both roots are within the radius of direct medication. One peculiarity is quite noticeable in removing the enamel of teeth that are abnormally sensitive, with the corundum wheel, there is always a greater or less amount of pain. In no instance have we been able to annul all sensory conditions, but change to a sharp bur, and in every instance there is an entire abatement of pain.

We have a new formula that has been given to two or three dentists in California with the request that they watch results and report. Discarding the aqueous solution entirely, with the idea that a cavity in a dehydrated condition gave promise of still more uniform results, we now use ten minims of carbolic acid to one grain of cocaine, drying cavity with absolute alcohol, chloroform and hot air blasts.

Recently we have had the opportunity of examining teeth operated upon in the fall of 1888.

Gentleman; age thirty-two years. Teeth extremely sensitive. Puts off operations until driven to dentist by pain. First operation—approximal

Case 1.

*It would be interesting if the author would give us the physiology of the astonishing phenomenon here reported. Dentine has no sensory organs; the removal of a pulp with its plexus of nerve-fibres thoroughly desensitizes the dentine of the tooth, instantaneously and equally throughout. Consequently, what we call "sensitive dentine," is merely dentine through which disturbing agencies readily reach the nerves of the pulp, causing painful response or sensation. If an area of dentine becomes desensitized, it must be because the nerves of the pulp no longer respond, and we have a right to expect that adjacent dentine would be equally insensitive. Where a superficial desensitization of dentine is produced so that after cutting slightly, deeper layers are found fully responsive, the explanation is that by dehydration the contents of the tubuli have been practically shortened, leaving the outer ends of the tubes sufficiently empty to interfere with the transmission of impulses, which, reaching the pulp, would cause pain. Similarly, if the reported experiment can be verified, then the whole theory of electric cocaineization of the tooth pulp, is proven to be a myth, and the desensitization of dentine is due to dehydration and is in no sense a local anæsthesia. But, since electric cocaineization of *exposed* pulps has been reported by hundreds of reputable men, true anæsthesia of the pulp seems to be possible. Consequently we are forced to ask for further experimentation, such as the author reports, before we can accept the deductions which would inevitably result.—EDITOR.

cavity in left superior lateral incisor. Second operation—Labial cavity, right superior central incisor. In both instances hot or cold and acids or sugars would cause intense pain. Electrical osmosis, complete in central and nearly so in lateral. After eight years tried teeth with electric mouth light and hot and cold applications. Pulp in perfectly healthy condition.

Case 2.

Lady; age twenty-two. Married. Peculiar temperament. Stands extracting without the use of anæsthetics, with perfect equanimity, but the first touch of a bur sends her into an hysterical condition. Operation—approximal cavity in left superior lateral incisor. Electrical osmosis completely successful. Find pulp in healthy condition after eight years. Our data is not clear as to amount of current used in these cases, but it was not over six cells of the Galvano-Faradic battery.

As to methods of use many complaints are heard of sloughing after lengthened application with high voltage, thirty, forty, fifty, sixty and even more volts having been used in some instances. This is the effect from the resistance encountered, and it is electrical burning, pure and simple, as reprehensible and inexcusable as it would be for a physician to prescribe a dose of morphine ten times larger than the usual dosage. In no instance is it necessary to use over six volts, and with such voltage results can be accomplished equal to any of the higher voltage, without the danger that accompanies high voltage.

In conclusion, remember the words of Herbert Spencer:

“It is impossible for man to create force. He can only alter the mode of its manifestation, its direction and its distribution.”

With the aid of electricity and cocaine we have the means at hand of doing great good by careful and honest effort, but by careless manipulation and ignorance of results untold suffering may be caused.

Cataphoresis.

By W. W. MOREHEAD, D.D.S., Aledo, Ill.

Read before the New Jersey State Dental Society, July, 1897.

It was known many years ago that substances could be carried along the path of an electric current from the positive toward the negative pole. But it remained for Drs. Morton and Gillett to introduce appliances that made the principle of anodal diffusion applicable in the treatment of sensitive teeth.

We know that cocaine topically applied does not produce deep anæsthesia; but we have found an agent which will carry our remedies deeply into either hard or soft tissue, so as to produce anæsthesia or relieve neuralgia.

An electric current travels in the direction of the least resistance. For this reason it is necessary that the rubber dam should be adjusted so as to exclude moisture, and also prevent the cocaine solution from entering the soft tissue. The latter being a better conductor than dentine, would divert the current so that the tooth would not be properly anæsthetized. Again if some of the preparation did pass through the rubber dam, an application such as would partially anæsthetize the tooth would be strong enough to cause sloughing at the cervical margin.

While not always necessary, yet it is advisable to insulate all metal fillings included within the dam, also, the ligatures; this may be done by coating them with a solution of chloro-percha.

The cavity should be kept flooded during the seance, but no excess should be allowed outside the cavity.

Often in approximal cavities in molars and bicuspsids, the solution may be concentrated within the cavity, by placing on either side and partially between the teeth, a pellet of cotton saturated with a solution of chloro-percha.

The positive electrodes should be secured by packing cotton around a hook or ball which has been made at the end of the platinum wire, or by a clamp electrode.

The negative electrode, having been moistened with a weak solution of sodium chloride, may be held in the hand; all rings having been previously removed.

**Removal of
Pulp Without
Hemorrhage.**

In anæsthetizing the pulp, make a short application so as to permit exposure and hemorrhage; the pulp being a good conductor, the last application may be made in a short time.

Hemorrhage, which so often troubles us when attempting immediate removal of the pulp, may be controlled and the pulp toughened by placing the positive electrode in the root canal, then turn on ten volts for a few moments, which will cause electrolysis, with the result that the pulp becomes coagulated and adheres firmly to the electrode.

The anæsthesia produced by electrical endosmosis depends upon the strength and quality of the cocaine, and if the solution is not freshly prepared, the quality will not be good. It makes no difference whether we use guaia-cocaine, electrocaine, or an aqueous solution, the cocaine must be of the best quality and consequently fresh.

The time occupied in benumbing a tooth varies according to the resistance; thus there is much greater resistance in a dense tooth containing a shallow cavity; consequently a stronger current and more time is required than would be needed in a deep cavity in a child's tooth.

Failure with cataphoresis may be caused by using unsteady and unreliable commercial currents; by using high voltage, which causes congestion and retards absorption; by turning on the current so rapidly as to cause pain, and thus give the patient an impression that the cure is worse than the disease; and by depending upon stale and inert preparations.

**Causes of
Injury During
Cataphoresis.**

Injury as a result of using cataphoresis, may be caused by ignorance of the principles of electro-therapeutics, by high pressure and long applications; to soft tissue, by continuous applications of such preparations as iodine, without proper dilution; to the hand, by allowing the electrode to come in contact with a ring on the finger; to the gum, by a clamp where the dam has been carelessly adjusted; and to the peridental membrane, by forcing irritants through the apex of the root.

I have imbedded a freshly extracted tooth with a live pulp, placed in the cavity a stained preparation, and with a strong current have carried the solution at least one-half an inch beyond the apex of the root.

Thus we see the necessity of using caution in selecting and preparing cataphoretic applications, because we know not how far they may be carried, especially when they come in contact with soft tissue.

In the future, when properly used and understood, the cataphoretic outfit will be as useful to the operator as the dental engine. Because of the time required, it will not be used so often, but it should be used when operating upon hypersensitive teeth, or when working for children and nervous patients. And time thus spent is not lost, for more time will be saved when it comes to the preparation of the cavity.

Many, in their ambition to allay the sensitiveness of dentine, have neglected to use this valuable agent in treating diseased conditions of the pulp and peridental membrane.

The medical profession realize the importance of devoting time and attention to electro-therapeutics, and if we expect to use this agent successfully, we must give it more study than we have in the past.



Cataphoresis.

By HENRY W. GILLET, D.M.D., Newport, R. I.

Read before the New Jersey State Dental Society, July, 1897.

One of the most important developments of the year in our knowledge of cataphoresis, relates to the change in our views of the method by which solutions are transferred from one point to another.

In considering the process to be a modified osmosis, we assumed that the current flow through the tissues resulted in a stream flowing from positive to negative, in which our drug was transported somewhat as chips float down a brook, into which they have been thrown. Another view was illustrated by one writer who compared topical application of the drug to a nail held against the board, and the current, to the hammer blow which drove it in.

These views have been materially changed in the past few months, and the writer's present estimate of the process would be better illustrated by the statement that, when we place a drug at one electrode, and pass the current, the opposite electrode becomes more attractive and the drug proceeds thither, just as a child will be content to be with its nurse at one end of the room till it discovers its mother at the other end. Then, if free to do so, it goes to the mother. Its sense of sight keeps it moving on step by step towards the goal, just as the current keeps the drug going on by making the area ahead of each molecule more attractive than the position which it occupies.

It is a process of leading, rather than of driving, or carrying by force of current flow.

This modification of our views is made necessary by the discovery that many drugs do not move in the direction of the assumed current flow, but rather in the opposite direction, from negative to positive.

The first published statement of experiments demonstrating this fact, which came to my notice, was that of Prof. W. J. Herdman. He demonstrated that potassium iodide travels from negative to positive as a compound molecule, and having reached the position it is electrolyzed or split up into its component parts.

Following out this line of experimentation, the writer reported at the recent meeting of the New York State Society, experiments corroborating Dr. Herdman's conclusions concerning potassium iodide, and demonstrating that iodine, both in compound solution and in tincture, moves in the same direction, from negative to

**Anaphoretic
Action of
Iodine.**

positive. In other words, iodine (in these three forms at least) is anaphoretic (Herdman) instead of cataphoretic. As these experiments will be published later, they will not be detailed here. They lead to the inference that the results following the cataphoretic use of iodine, have followed rather because of the prolonged contact and consequent favorable conditions, than because of the deep penetration of the iodine.

The direct effect of the current itself in modifying the local conditions may also have been a factor.

The rapidity with which iodine and its compounds travel through media in laboratory experiments, leads to the conclusion that its application anaphoretically should be made with extreme caution until we have more clinical evidence as to the results when it is so applied. The writer would consider it unsafe to make long application, or to use other than very dilute iodine solutions in that way. The saturation of gum tissue and alveolus, for instance, to a depth of one-quarter or one-half inch with a strong iodine solution can scarcely be other than disastrous.

Iodine travels in cotton under a current of three milliamperes or less, with considerable speed (one inch in ten minutes). Potassium iodide travels still more rapidly under a similar current (two and a half inches in seven minutes, being one record).

It is to be noted also that the statement that the transfer of the drugs comes to a stop midway between the two electrodes, is an error.

At least iodine and iodine compounds, so far as tested, go all the way through to the positive electrode, when placed at the negative and exposed to the influence of a suitable current.

The Relation of the Second District Dental Society to Students, as a Factor in Dental Education and Ethics.

By DR. THADDEUS P. HYATT, of Brooklyn.

Read before the Second District Dental Society at Newburgh, October 11, 1897.

In a paper by Dr. W. C. Barrett, which he read before the National Association of Dental Faculties, he said: "It is not too much to say that our professional reputation must be what our colleges make it. We are the educators of those who are to be leaders in the professional matters of the future. The next generation of dentists will be what we make it. Legislators may pass laws to regulate and restrict dental practice, but the stream can rise no higher than the fountain-head, and the practitioner of tomorrow must get his training and derive his professional knowledge

from the school of today. He must enter the profession by submitting himself to our guidance. The colleges are the fountain-head, and the stream will be limpid, or foul, according to whether we purify or contaminate it."

Gentlemen—is this true? If it is true what credit is there then to us as members of the dental profession? Should it not be that the profession is the fountain-head, the parent of the future generation of dentists? Shall we allow the younger members of our profession, who are just commencing to learn the rudiments of dental science, to call another their fountain-head, their guardians, their real instructors? No, not when we shall have awakened to a fuller realization of our duties, our greater responsibilities. It is to us that students should look as the real teachers of the truths of dentistry.

The colleges do naught but teach what we have discovered; they only give the results of our researches and studies; that which we have lived and worked for, even while earning our daily bread. Is there a college which has added any new knowledge to dental science? Then why should they be called the "fountain-head," the source of knowledge for the future generation of dentists?

But, if we are to be looked upon as not only the fountain-head of dental science, but also as the guardians, parents, and teachers of our students, then pray what have we done to establish such a relationship between students and ourselves? Have we acted as a parent should, as one who is conscious of his position, one who realizes his responsibilities? I think not; the dental profession has permitted a number of colleges to come into existence which are independent of us, over which we really have no control, as they are at present constituted; so in no real sense can it be said that they represent the profession. Then when we find some of the students are not being fully qualified to practice, we tacitly blame all the students by making the diploma, which they have worked for and paid for, useless. We demand that they shall pass another examination. We have considered them as outsiders trying to gain admission into our ranks under false pretenses. We have looked upon them as competitors against us, rather than as workers with us. In other words we have treated our children as though they were illegitimate; as though they were bastards! We have failed to see that they represent a part of our profession which has been imposed upon because of our neglect.

Is it any wonder then that these students should look upon us with disfavor? Is it strange that they should think we wish to make a monopoly to keep them out?

**Proper
Treatment of Dental
Students.**

When a man has chosen of his own free will to become a dentist, that moment he is one of us, belongs to us by all the rights of God and man. He is really blood of our blood, bone of our bone, and it is for us to see in him all the possibilities of a future greater than that of the present. This new-born child of ours is of as much importance in reality to the community at large, and to our profession, as we are ourselves. We should see to it then that our children have the best of care, the best teachers of our science, the best men of our profession, who embody not only the most advanced ideas upon dentistry, but who are examples of the highest professional ethics.

It is the first-year student who has all the freshness and enthusiasm of youth. It is he as a rule, who desires to become a leading dentist, to add something to the general knowledge of dental science. But by the time he has become a third-year man he has realized the condition of the times; he thinks—*he feels* the attitude of the profession towards him. Competition—competition—each for himself—the devil for the last—and so the mercenary side of human nature is developed.

Were we in touch with first-year students, did we but let them see that we consider them as workers *with us*, and not as future competitors against us, we should be able to keep alive their enthusiasm, and more men eager for new knowledge, and with the desire to perfect themselves in every way, would join our ranks, while the number of advertising dentists would grow less and less as the years rolled by.

Last spring a student called at my office to inquire about some business matters. After the business had been transacted we talked dentistry, and I showed him my operating and mechanical rooms. This summer we met again in the country, and one day this young man told me, he had intended becoming an advertising dentist as soon as he received his diploma, but after talking with me and seeing my office, he had changed his mind, and was now determined to become a professional dentist. We had not discussed the question of advertising dentistry at all.

This gave me food for thought, and it seemed to me that if this was the result of the work of one of the members of our society, what would be the result if the whole society, as a part of the dental profession, should realize this relationship between the students and ourselves. Recognizing this relation, let us hold out our hands and proceed to establish such bonds, that time can only unite them closer and yet closer together. As in nature it is the parent who first recognizes his child, so it must be with us; we must take the first steps to recognize the students as members of our profession, and to take official action at once to carry out this idea.

SOCIETY PAPERS

FROM
Roberts & Smythe,
DENTAL DEPOT,
20 WITHERELL ST., DETROIT, MICH.

I do not purpose in the short time I have been given for my paper, to attempt to suggest any particular line of work, but rather, would ask of you to join with me in thinking out plans so these ideas might be carried into effect. Remember we seek the students, regardless of the college, whether the college be old or new, good or bad.

I cannot close without a few words about the colleges. I do not wish to be understood as saying anything against any college, or those who manage them, and in fact they certainly have been a great aid, say what you will—for the preparation of study and work—which work has only really commenced after graduation. There is, however, a college that I should like to see in existence, and this is a brief description of it—merely a suggestion in fact.

**The Ideal
Dental College of the
Future.**

A college, which, either supported by the State or endowment, should have eliminated from it any idea of money making—a college which should be controlled by the State Dental Society.

The State Dental Society should elect by ballot those whom it thought best fitted, either by knowledge—or by the ability to impart knowledge, to be the professors of that college. Then would the degree of professor be an honor that any one would prize.

The final examination should be given by a board of examiners, none of the professors to be examiners, though they should act with the board. Examination to be public, not private. Negotiations should be made with the dental and medical authorities of England, France, Russia, and other countries, to the end that the diploma of the New York State Dental College would entitle the holder to practice in those countries without further examination.

Arrangements made with other State dental colleges of this country, so that the holders of our diplomas could practice in those States without examination.

A college where a scientific system of record should be kept of every case treated in the infirmary, so that the results could be recorded and the facts given to the profession at large.

A college with laboratories fitted up for scientific investigation of dental subjects by practitioners.

Such a college as this would be truly representative of the profession. Of *such* a college it could be said: "It is the fountain-head of dental science."



Cast Aluminium Dentures.

By DR. A. A. POWELL, Gas City, Ind.

Read before the Eastern Indiana Dental Association, May 5, 1897.

Not until A. D. 1828 was aluminium discovered, then by Wohler, and for twenty years it remained a mere chemical curiosity until Deville succeeded in manufacturing it in large ingots by the action of sodium upon the chloride of aluminium.

At first the reduction process was slow and costly, the practical age remaining until the last decade of this century (1892) when electrolysis, guided by the hand of Hall, produced a pure article at a minimum cost.

It seems not a little strange that of the seventy-four discovered elements, aluminium in its great abundance throughout the world, should have remained a secret so long. But probably, as with other matter, the law of application is accountable.

Much credit is due the late Dr. Bean, of Baltimore, for the progress made in cast aluminium. His study and discoveries promised much. A score of years have passed since a Swiss avalanche carried with it his precious body, little advancement having since been made, the life of the work seemingly going out with his.

Aluminium in its purity being soft, is greatly improved for our art by an alloy of five per cent. silver, which gives it elasticity, hardness, toughness and strength, forming a metal approaching silver coin in hardness, while all its admirable qualities are retained, viz., lightness, brightness, non-corrosiveness, and affinity for vulcanite.

First requisite in beginning the work, and upon which rests its ultimate success, is a pure metal, and this electrolysis has made possible.

Accuracy of a base plate is assured by casting as each little rise and every valley, is reproduced, so that an imperfect fit can hardly be attributed to any other cause than the want of a correct impression. The expansion is compensated for by an equal amount of contraction.

These specimens were made by the Zeller apparatus. Its workings can be better understood only by a practical demonstration.

Advantages of Aluminium.

Many excellent claims can be made for aluminium: First; Its salt, alumnol, is a non-poisonous antiseptic astringent. Second; In metal plates, cast aluminium ranks a close second to gold, while in perfect adaptation it is inferior to none. Third; Aluminium has all the properties for immediately conducting the thermal changes to the cov-

ered mucous membrane. Fourth; Aluminium is the lightest metal known with the exception of magnesium. It resists the action of sulphur, nitric and sulphuric acids; nor is it affected by the vegetable acids, such as citric, oxalic and tartaric.

Its record of resistance to change by acid and alkali is a very fair one, giving rise to conjecture of possible impurity of metal in explanation of cases in which it is reported to undergo changes in the mouth; this is strengthened by peculiarity of change—it occurs in spots seeming to indicate a local impurity.

My experience with aluminium covers five years. Having many individual cases, the condition of the mouths must necessarily vary greatly. I have the first complaint of any kind to record. All patients are delighted, and indeed, it is a pleasure to meet them!

By its service the raw, inflamed tissue so often found under the unclean, heat retaining rubber plate, is eradicated.

From a sanitary point, it is a superior plate. This alone would seem to appeal to the olfactories and prompt the æsthetic dentist to recommend a cleanly, wholesome denture.

Cast aluminium affords us an opportunity of vastly raising the standard of our profession, bringing a fine class of work within reach of a people who appreciate its value, and whose purse will not admit of the more costly plates. "In comparison with gold, it is a modifier of expense."

Dr. Haskell says: "That vulcanite has enabled many people to obtain artificial teeth who would otherwise be deprived of them. The work is so simple, a multitude of quacks have set up in business who have not the remotest idea of how teeth should look in the mouth, and the result is we meet people at every turn whose mouths are reminders of rubber plates and cheap dentistry."

The result of this degeneracy from art to mere mechanism, has alike been disastrous to practitioner and patient. Hence, great efforts are being made to redeem prosthetic dentistry by the adoption of some system or method which shall have a tendency to elevate and perfect it.

Again, aluminium is to our advantage furnishing, as it does, a step towards the original and noble standard in plate work from which we have fallen. The higher the grade of workmanship, the more difficult to perform.

I appeal then for each one of us to press forward and work for a more artistic, skilful and scientific kind of dentistry.



New Jersey State Dental Society. — Twenty-Seventh Annual Meeting.

Discussion of Paper by Dr. B. Holly Smith.

Dr. R. M. Sanger. This paper plainly appeals to the common sense and good judgment of every man present. All that one can say is that every member should go home with a determination that, if he is not already doing his duty in this line, he will begin at once, and will leave no stone unturned to bring about that reform in prophylaxis which we all know is sadly necessary.

Mr. Chairman let me occupy a few minutes more of your time.

Dr. B. Holly Smith. I received, a few days ago, a little pamphlet, which came from the City of Brotherly Love. It has on the outside: "Beautiful Teeth, How to Get Them and How to Keep Them;" with it was a circular letter, addressed personally to me, and which reads something like this: "The booklet herewith enclosed is for the sole use of non-advertising dentists, and is intended to supply them with a purely legitimate method of bringing themselves to the notice of patients. It is written in response to a number of requests received from dentists for literature that can be used without a violation of professional ethics. It has been represented to me that the cheap dentistry now so rampantly advertised is not only injurious to the profession, but demoralizing to the public welfare, the work being generally performed with an eye single to the immediate dollar, regardless of future discomfort to the patient. This book will, in a great measure, offset this cheap or fake dental advertising. Associations of dentists have examined this pamphlet and endorsed it fully. It has been written after a careful study of the subject and the matter is presented in a form at once attractive and readable. I will furnish these booklets at the following prices," and so on.

There are a few rather pretty faces of actresses showing their teeth, and there are some very remarkable and absurd statements in the pamphlet.

Now, I claim, gentlemen, that this booklet, which has no doubt been sent broadcast over the United States to members of the dental profession, is another warning to the men who are really interested in dental prophylaxis. I claim that this scheme, which is probably promoted by some foolish young man, is only another evidence of the fact that we, in our associations, have not promulgated a pronounced mode of procedure, in such emergencies as have been described in my paper.

Do we ever instruct our patients as to methods of cleansing their teeth? Have we any accepted form of tooth brushes? Do we recommend any proper mode of removing food from the teeth? Is there a man in this room who knows what is a proper tooth-pick? Does Dr. Flagg know what is a proper tooth-pick? Is it indecent to use a tooth-pick at all? Is floss silk a proper means of removing food from the teeth? I ask these questions because I think it is a proper matter for your consideration. Probably we are going too fast, and neglecting some of the minor details.

There is an old adage that an ounce of prevention is worth a pound of cure. If so, what would be the original ounce of prevention in prophylactic dental work?

Dr. J. Foster Flagg.

If there is any point upon which opinions differ, if there is any point upon which no two dentists are positively agreed, it is upon the values of floss silk, tooth-picks, tooth brushes, tooth washes, tooth pastes, and all those things which are used in the name of prophylaxis.

If you will go into any ordinary drug store, as I have done time after time, and examine the tooth brushes there, and the manner in which the bristles are arranged, I think you will acknowledge that there is hardly one brush in ten thousand that is worth one cent or that is really fit to use, or that would be of any benefit to the teeth.

What do we know about tooth-picks? What is the right kind of tooth-pick? What is the right shape for the tooth-picks that are made by the bushel? They are little split slivers sharp in the points, and are used for two purposes: one is supposed to be the cleansing of the teeth, the other is to be chewed by those who stand around hotels, in order to make their friends who pass by think they have been in to dine. Is it right that a tooth-pick should have a sharp point? Is it right that it should be made of wood? Would it not be better to have a square point? Would it not be better if made of a quill? Would it not be better if all the tooth-picks and brushes and washes and pastes were abolished? Some

are injurious, some are not injurious; but I ask you if they are not all really useless?

That prophylaxis has been the most neglected
Dr. G. Carleton Brown. of all the various phases of our profession there is no question, and it is probably as little understood as cared for. If the plan suggested by Dr. Smith could be carried out it would result in great benefit. If some plan could be adopted for a general movement towards the education of patients, if the ideas suggested to-day could be practically followed out, it would undoubtedly be of great benefit to the patient as well as to the practitioner. The subject of tooth-picks and brushes is one that has been talked over and disagreed upon more than almost any other, and probably will continue to be so. With few exceptions, the tooth brushes sold are absolutely worthless. As to the tooth-pick, it is probably a necessary abomination, but as far as I can see I think that silk floss is the proper means of cleansing the teeth.

As physicians, taken as a whole, know little or
Dr. B. F. Luckey. nothing about dental lesions, and prescribe little or nothing for them, so I think dentists, as a whole, know little about, and prescribe little or nothing in the direction of prophylaxis. I have heard that there are no tooth brushes among the thousands that are sold every year, that are good for anything; that there are no tooth-picks to be had from one end of the world to the other that are worth using, that there is no dental floss made that is worth the time spent by the dentist in advising his patient to use it; but, gentlemen, I do not feel myself in harmony with such statements. If my experience is worth anything to me it is worth something to other people; and I have found comfort and satisfaction in the use of the Chinese tooth-pick, the orange-wood tooth-pick. It is vastly different from the American wooden tooth-picks; it is small and slender, it is tough, and it is useful; it has a smoothness that the quill tooth-pick has not. There is a satisfaction in using it that I have not found from any other tooth-picks. Then there is a tooth brush called the Prophylactic, that I have found more satisfaction personally in using than I have with any other.

Mr. Chairman, I ask you to appoint a committee
Dr. Holly Smith. to investigate this subject. I ask it out of courtesy, because I have no rights here at all, I am here because you fellows love me.

(A motion to this effect was made and prevailed).

Gentlemen, we now come to the symposium on
The President. cataphoresis. These papers will be read, and then we will enter upon a discussion of the general subject.

Discussion of Papers on Cataphoresis.

With reference to the time necessary to obtund
Dr. S. Eldridge Guilbert. I may say that I have never had a case which I have not obtunded in a great deal less time than a half hour. And I do not believe in high voltage. I never saw a case that I could not control with less than twenty-five volts, generally from six to eight or ten or eleven. Sometimes it runs up higher.

The insulation should be perfect; you cannot have perfect results without perfect insulation.

I usually, where I can, ligate the adjoining tooth, not using the electrode at all, but simply the end of the cord with the little piece that the electrode fastens to.

As to the strength of the cocaine, I am not particular; it is usually from twenty-five to thirty-five per cent.; I don't care how strong it is.

Sometimes it will be found that the bulbous portion of the pulp and the palatal root are thoroughly anæsthetized, and can be removed without any pain, while the buccal root is still sensitive. That is because the current preferably follows the largest canal. After removing the pulp from the palatal root, apply the current for five minutes more to the buccal root, and you can then readily remove the pulp from it; but do not do that until after cleansing the first canal.

I have never seen a case where a pulp has been injured in the least, as far as I could detect, that is, with low voltage. The pulp may be injured, I believe, with high voltage.

I have extirpated a great many pulps, and have treated a great many, and I have yet to have a case that has developed peridental inflammation afterwards.

I bleached a tooth a short time ago in six and
Dr. Chas. Meeker. one-half minutes. That is the shortest time in which

I have ever been able to accomplish the bleaching of a tooth. I have been as long as an hour, then doing it satisfactorily. When I have a case where the tooth is yellow and of dense material, I place 25 per cent. aqueous pyrozone in the cavity and stop it up for a day, and I find that when the patient comes again I can work more quickly and bleach the tooth more satisfactorily than I could without this preliminary application. I have been bleaching teeth now with electricity for three or four years, and I have had none fail yet that were done in my office. Those done at clinics have not all been successful, because

I did not work at the clinics under such advantageous circumstances as I did at my office.

The President. What solution of pyrozone do you put in the tooth when you dismiss the patient for a day or two?

Dr. Meeker. It is a 25 per cent. solution. I have a case that I am going to undertake on Monday, for Dr. Holyhead, of California. It is a very dark tooth. I shall

put on an arrangement which consists of a rubber nipple, on a little glass tube, with a curve in the glass tube, and a thin platinum wire, curved like a spring. I put the nipple on the tooth and tie it well, then put the little curved glass instrument in at the open end of the nipple, and fill it with 25 per cent. pyrozone. I then make a connection with the positive pole, and in that way give the tooth a bath of 25 per cent. pyrozone. It is not very easy to do, because you cannot see your work until you take the apparatus off.

Dr. E. K. Wedelstaedt. Dr. Meeker, can you bleach a tooth when the case is not as successful as you expect it, by putting pyrozone in the cavity and stopping it up with gutta percha, and then bleaching it out the next day?

Dr. Meeker. Most assuredly. I want to give credit to Dr. Guilbert for one little point that he gave me; that is the use of sulphuric acid where you have a tooth that has been filled with amalgam.

Dr. Guilbert. You would not have time to bleach a tooth that is black from amalgam; you might bleach it for a week and it would still be black. If, in such a case, you reverse the polarity, or apply the negative instead of the positive pole to the tooth, using a 3 per cent. or 5 per cent. solution of sulphuric acid, placed in the tooth on cotton, placing the negative pole to the tooth and the positive pole to the body, in a few moments you will find that the oxide has been extracted from the tooth on the cotton. In that way you can bleach those teeth. The method is not original with me; I think Dr. Kells, of New Orleans, is the originator of it.

Dr. Howard E. Roberts. Mr. President, I have been interested in electricity for a much longer time than I have been in cataphoresis, and I think that every dentist who undertakes to use cataphoresis should understand something of the laws that govern electricity. No matter what instrument you use, you want to know how to use it and what you are doing. One of the simplest and easiest ways of knowing that is to remember that cataphoresis is simply electrolysis; metals are taken from the anode and placed upon the

SOCIETY DISCUSSIONS

* * FROM * *
Roberts & Smythe,
DENTAL DEPOT,
20 WITHERELL ST., DETROIT, MICH.

cathode by the action of electricity, the metals following the current; and so in cataphoresis we have a drug passing from the anode to the cathode. That is the principle of it.

Another thing is that the voltage does not count in the quantity of medicine which you can get into the cathode. It is ampereage that does the work; voltage is only to overcome resistance. If the resistance is less than the voltage, the current will carry the medicine into the tissue. If the resistance is such that you cannot get the current through, then you must increase the voltage. It matters not whether you have a battery instrument, or whether you have a direct current, the principle is the same. If you start with five to ten cells and you cannot overcome the resistance, you must turn back and start in again with more cells.

There is one point which was not brought out in either of the papers; that is the use of cataphoresis in opening a fistula through the gum in what is termed a blind abscess. By using a hand electrode, or a straight platinum wire with cotton wound around it, and using cocaine, from four per cent. to ten or twenty per cent., and pressing that slightly over the spot where you wish to make an entrance, putting the other electrode in the palm of the hand and not using a high voltage, but turning up the current slowly until the patient begins to feel a slight pain, the cocaine will anæsthetize the gum so that you can open the abscess without much discomfort to the patient, and the gum heals without inflammation. I get better results than with any other method of treatment, and it is also painless.

The electrode of the negative pole should be placed, I believe, in the palm of the left hand. If you place the electrode on the back of the hand or wrist, and keep it there for any length of time, you have some risk of producing blisters; the tissue is eaten out and taken away. For that reason I never put the electrode on the back of the hand. If you put it in the palm of the hand, the skin of the hand has greater resistance, and you require more current, but you have plenty of current. Some place the electrode over the tooth on the face, but I do not care to run the risk of marking a patient's face for weeks or months when it is unnecessary; I therefore put it in the palm of the hand.

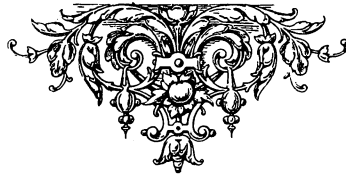
If there is much leakage of the current, the patient will have a sore gum.

It is possible to produce anæsthesia although the tooth be not fully insulated. Electricity will follow the path of least resistance; and in a tooth where there is leakage the current divides up, part going through the gum and part through the tooth. Only a small part goes through the tooth, but enough, if you keep it up, to anæsthetize the tooth.

In bleaching teeth I always use sulphuric acid, having the open cavity thoroughly washed out with sulphuric acid and a little bicarbonate of soda. Roots that are open nearly to the apex are plugged with gutta percha; you do not want the current to pass out through apical end of the root.

The President announced the appointment of the following committee of five, to investigate and report to the society some plan for instructing patients in dental prophylaxis:

Dr. S. C. G. Watkins, Dr. P. J. Wilson, Dr. B. F. Luckey, Dr. C. W. F. Hoblitzell and Dr. J. A. Waas.



Connecticut State Board of Examiners.

Reply to Critics.

Hartford, Jan. 6, 1898.

Editor ITEMS OF INTEREST.

My Dear Sir:—In the recent number of your magazine, page 813, there was published a correspondence over the signature S. P. Cronana, D.D.S., dated Bridgeport, Conn., October 16, 1897, containing the following statements, referring to the Dental Commissioners of Connecticut:

“Drs. Graham, Parmele, Rider, Browne and Fones practically appointed themselves, when the commission was created four years ago. They are all old timers and hardly abreast of the times. Their administration of their duties has shown to many of us that there was good reason for a change. In a number of cases of which I personally know these gentlemen gave certificates to applicants who had no right to them under the law.”

The members of the Dental Commission could not allow so grave an accusation directly against themselves and also against an indefinite number of members of the dental profession to appear in the columns of a reputable magazine and pass unnoticed.

The above quoted notice charged the commissioners with indecent self favoritism in their appointment, and with deliberate official misconduct or reprehensible negligence or both in their administration and also charged misrepresentation on the part of “a number” of dentists holding certificates of the legal right to practice in this State. The Dental Commissioners, therefore, felt that their official, as well as personal honor demanded a prompt and thorough investigation, and they thereupon sent the following letter to the address that was appended to the correspondence of August 16, 1897, that appeared in your magazine October, 1897:

Hartford, Dec. 3, 1897.

S. P. Cronana, D.D.S., Bridgeport, Conn.

Dear Sir:—There has appeared in the pages of ITEMS OF INTEREST, “a monthly magazine of Dental Art, Science and Literature,” and published by the Consolidated Dental Manufacturing Company of New York (in the October number, 1897), a correspondence over your signature which charges the Dental Commissioners with having given to applicants, who had no right to them under the law—certificates of right under the law to practice dentistry in this State. You state in said correspondence, that the Dental Commissioners have done this in a number of cases to your personal knowledge, thus publicly charging the commissioners with negligent and illegal conduct in their official duties, and

also charging several unnamed practitioners in this State with having fraudulently obtained their licenses or certificates of legal authority to practice under the laws of Connecticut.

In either case the charges are too serious to be passed over without official notice. The honor of the commission and simple justice to the members of the profession who have rigidly observed the law require that so serious a charge should be thoroughly investigated and the parties in fault properly corrected.

You are, therefore, respectfully invited to attend the session of the Dental Commissioners at the State Capitol at Hartford on Saturday, December 11, at three P. M., and give the commissioners the information of which you have personal knowledge that sustains the charges so made by you in said correspondence above referred to. Yours respectfully,
GEO. L. PARMELE, Dent. Com. and Recorder.

The commissioners gave public notice of their session at the State Capitol by inserting in the Hartford daily newspapers the following advertisement, which appeared on the following date: November 27 and remained in until December 11:

The Dental Commissioners of Connecticut will meet in the Capitol at Hartford, Saturday, December 11, at three o'clock for the election of officers and will at that time listen to any complaints that may be laid before them.

GEO. L. PARMELE, M.D., D.M.D., Recorder.

On December 11, 1897, Dr. Parmele, recorder of the Dental Commissioners, received the following letter, which was submitted to the full board of commissioners at said meeting:

Bridgeport, Conn., December 10, 1897.

G. L. Parmele, M.D., D.M.D., Dental Commissioner and Recorder,
Hartford, Conn.

Dear Doctor:—Your letter or notice of Dec. 3, 1897, inviting me to attend the session of the Dental Commissioners to be held at the State Capitol, Hartford, Dec. 11, 1897, and give the commissioners the information of which I have personal knowledge that sustains the charges made in a letter published in *ITEMS OF INTEREST*, Vol. XIX, No. 10, October, and purporting to have been signed by me, received. I should be pleased to meet your board, but as I neither wrote, nor signed, nor caused to be sent the letter referred to, to *ITEMS OF INTEREST*, I see no reason for such appearance. Trusting that this statement may cover the information you desire. I am, yours very truly.

S. P. CRONAN, D.D.S.

December 10, 1897.

No one appeared at said meeting to offer any proof of said charges. Dr. Cronan's letter was read and the commissioners requested the recorder to write to your magazine a brief statement of the matter including what had been done by the commissioners in the premises and also giving the correspondence with Dr. Cronan, whose name had been fraudulently used as accuser of the Dental Commission, with a request that you would give this as free and prominent a place in your columns as was given to the Cronan letter of August 16, 1897. Dr. Cronan's letter of December 10, 1897, shows that your magazine was imposed upon in a shameful and criminal manner by some person as yet unknown to you or to the Dental Commissioners. Up to this time you have known nothing of this matter, and we assume that Dr. Cronan's first knowledge of the appearance of the fraudulent letter in *ITEMS OF INTEREST* was on his receipt of my letter of December 3, 1897, otherwise he would have promptly and emphatically repudiated its authorship. We will be pleased to receive any suggestions as to what course should be pursued in order to discover the perpetrator of this crime of imposing upon a public journal a forged libelous letter, and will cheerfully lend our labors to that end. Very respectfully,

GEO. L. PARMELE, M.D., D.M.D.,
Recorder and Dental Commissioner of Connecticut.

Explanation of Our Position.

The above communication from the State Board of Examiners of Connecticut caused us great surprise. The letters which were published, including the one supposed to have been written by Dr. Cronan reached us in such manner that we had reason to consider them authentic. Had they merely come to us through the mails, we would now be in no position to trace the Cronan letter back to its source. But as the three letters were personally delivered by Dr. Baker to one of the agents of the Consolidated Dental Manufacturing Company, there should be no difficulty in discovering the author of the letter now said to be a forgery.

Immediately upon receipt of the communication from the Secretary of the Connecticut Board the following letter was forwarded to Dr. Baker:

January 12, 1898.

Dr. C. B. Baker, Sanford Building, Bridgeport, Conn.

Dear Doctor:—

Some months ago we received from one of our branch houses three letters discussing your appointment on the State Examining Board. One

of these was signed by Dr. Cronan, Bridgeport, Conn. I was informed that these letters were handed to you by the writers, and by you delivered to our house.

I have received a letter from the State Board of Examiners, informing me that Dr. Cronan denies the authorship of this letter. This places our magazine in an awkward position, and I trust that we may rely upon you to disclose the facts so that our position in the matter may be made clear. I should be much indebted if you will forward me a sworn affidavit, stating the exact facts in connection with the writing of the letters, to the effect that these letters, as I understand it, were given to you for publication and that you forwarded them to us. Of course, I wish to publish the complaint of the State Board.

Will you kindly give this prompt attention, as I wish the matter to appear in our next issue. Yours very truly,

R. OTTOLENGUI.

To this Dr. Baker sent the following reply, accompanied by the appended affidavit, which merely explains that he did not inspire the letters:

Bridgeport, Conn., January 14, 1898.

DR. OTTOLENGUI.

Dear Doctor:—Yours received. I much regret that those who wished to do me a kindness, yourself included, should be put to any inconvenience, but you will understand that I, too, find myself in an awkward position. I am sorry not to be able to do exactly as you request. I knew that the letter was to be published, although disclaiming sympathy with some of its sentiments. However, since the writer of the communication does not see fit to acknowledge its authorship, I cannot reveal the identity of the man who tried to take my part, or refer to other friendly offices in this unpleasant affair. I can, at least, answer for myself, and you will find enclosed a sworn statement.

Yours truly,

CHARLES B. BAKER.

I neither wrote, dictated or suggested the article which appeared in *ITEMS OF INTEREST* issue of October, 1897, signed "S. P. Cronan, D. D. S., Bridgeport, August 16, 1897."

Signed,

CHARLES B. BAKER.

Personally appeared Charles B. Baker, and made oath to the truth of the foregoing, before me

FREDERICK A. BARTLETT,

Justice of the Peace, Sanford Building.

Dated at Bridgeport, this 14th day of January, 1898.

The following is a sworn affidavit of the agent at the New Haven branch of the Consolidated, declaring that the letters were personally delivered by Dr. Baker to him, with the request that they be sent to the New York house for publication in *ITEMS OF INTEREST*:

New Haven, Conn., January 21, 1898.

This is to certify that I, Charles A. C. Kelly, of New Haven, Conn., as agent for the Consolidated Dental Manufacturing Co., of New York

City, N. Y., received from Dr. C. B. Baker, of Bridgeport, Conn., the copies of the three (3) letters, signed respectively by Dr. S. P. Cronan, Dr. F. H. Jackman, and Dr. Spaulding, all of said Bridgeport, Conn., with accompanying request of said Dr. C. B. Baker that they be forwarded by me as said agent for publication to the *ITEMS OF INTEREST*, a dental journal published by said Consolidated Dental Manufacturing Co. in New York City, and that I, as said agent, accepted the letters from said Dr. Baker as genuine.

CHARLES A. C. KELLY.

Witness: H. B. PULSIFER.

Hartford, Conn., January 21, 1898.

Personally appeared Chas. A. C. Kelly, signer and sealer of the foregoing instrument, and acknowledged the same to be his free act and deed before me.

GEORGE E. TILTON,
Notary Public.

At the time of publication we were under the impression that the letters had been handed to Dr. Baker by the writers, but as far as can be understood from the above letter from Dr. Baker, it would seem that he received them from an intermediary whose name he does not disclose. As Dr. Baker is a member of the Board which complains of the alleged forgery, if the Board desires to proceed further in this matter and discover the author of the imposition, it would seem a simple course is open to them. Let them insist that Dr. Baker explain how the letters came into his possession. The intermediary who handed them to him should be able to explain where and how they were obtained.





Office and Laboratory of Dr. H. B. Hinman, Bucyrus, O.

The accompanying illustrations represent the office of Dr. H. B. Hinman, of Bucyrus, a city of seven thousand population, and the county seat of Crawford County, Ohio.

The office occupies the second floor front, of the Walther Block, located on the main street, and half a block from the public square. The rear portion of the building is occupied by Dozer & McLain, the gentlemen who made the photographs from which these illustrations were taken. The hallway and stairs are shared in common with them.

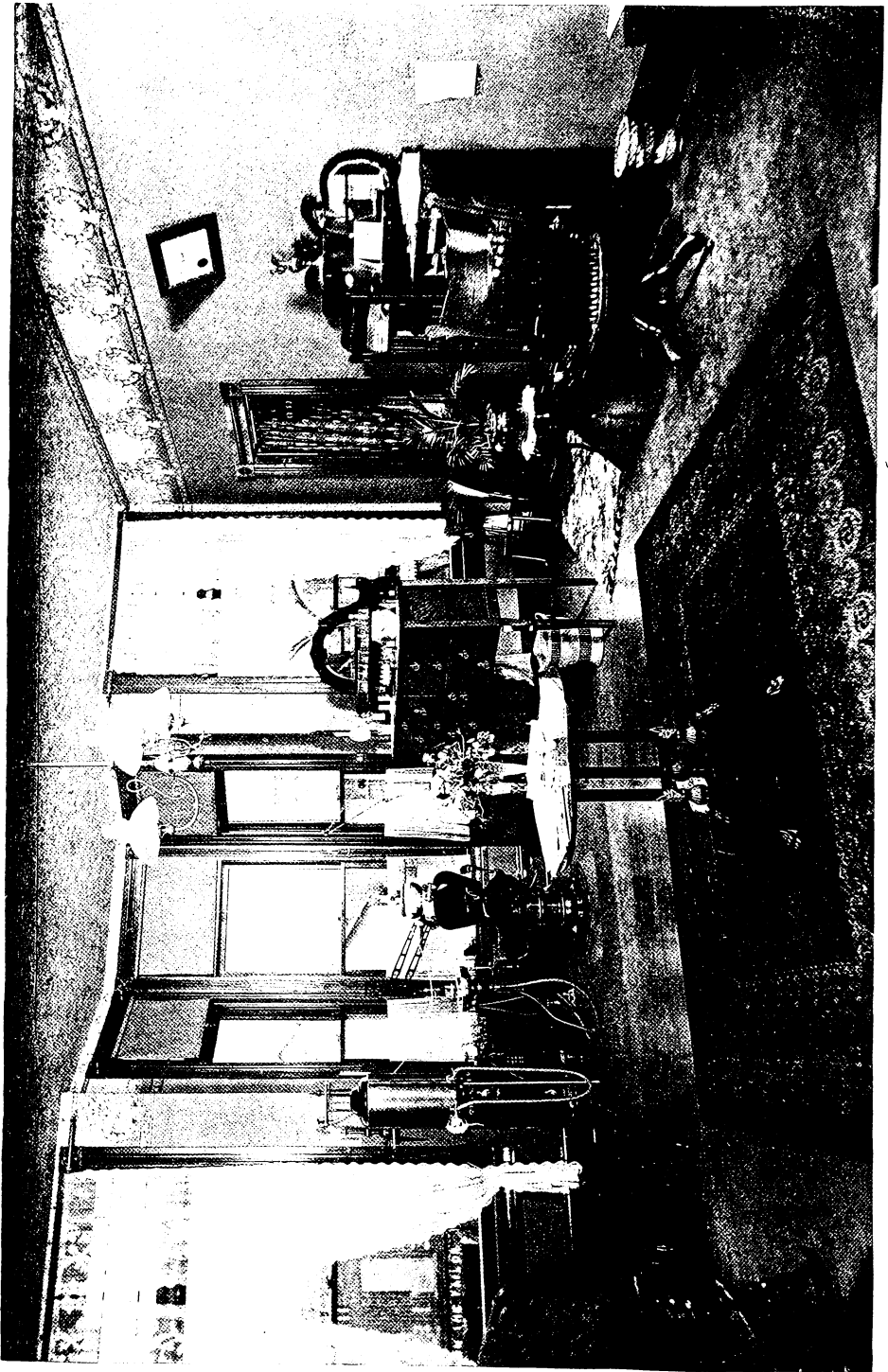
The suite consists of three rooms: a laboratory 15 ft. x 17 ft. back of the operating room, and opening into it by means of large sliding doors, and also having an entrance into the hall. A waiting and operating room, 19 ft. x 19 ft., and a toilet room, 3½ ft. x 8 ft.

The laboratory is lighted by a large skylight, located immediately over the work bench, thus affording an excellent light to work by, and good ventilation. It also acts as a hood to carry off sulphuric acid fumes, and other noxious vapors.

The illustration of the work bench gives a very fair idea of it, but in order to fully appreciate its convenience, it must be used. Each instrument has its separate compartment, the drawers being subdivided by small partitions. The bench is built on a curve, so that all parts of it can be reached when one is sitting on the revolving stool at the center.

I consider it very desirable to have the operating room separate from the waiting room, but in common with the majority of my fellow practitioners in our smaller cities and towns, I have been unable to secure accommodations where this would be possible. I do the next best thing, and place a large screen behind my chair while I am operating.

My waiting and operating room is large and well lighted—papered in a delicate shade of terra cotta ingrain paper, and has a waxed hardwood floor. There is a very pretty fireplace in the north end of the room, not shown in the illustration. A fire in this during the spring and fall adds much to the cheeriness of the room. The windows face the east,



and while I consider a north light the most desirable, still, I find that by having my chair in the bay window, with the proper regulation of the window shades, I can get an excellent light at any hour of the day.

I use a Columbia chair, and am intending soon to put in a Columbia electric engine.*

The fountain spittoon shown in the illustration is a Clark, and I cannot speak too highly of it. The saliva ejector alone is, in its convenience to the operator, and added comfort to the patient, worth the full cost of the outfit.



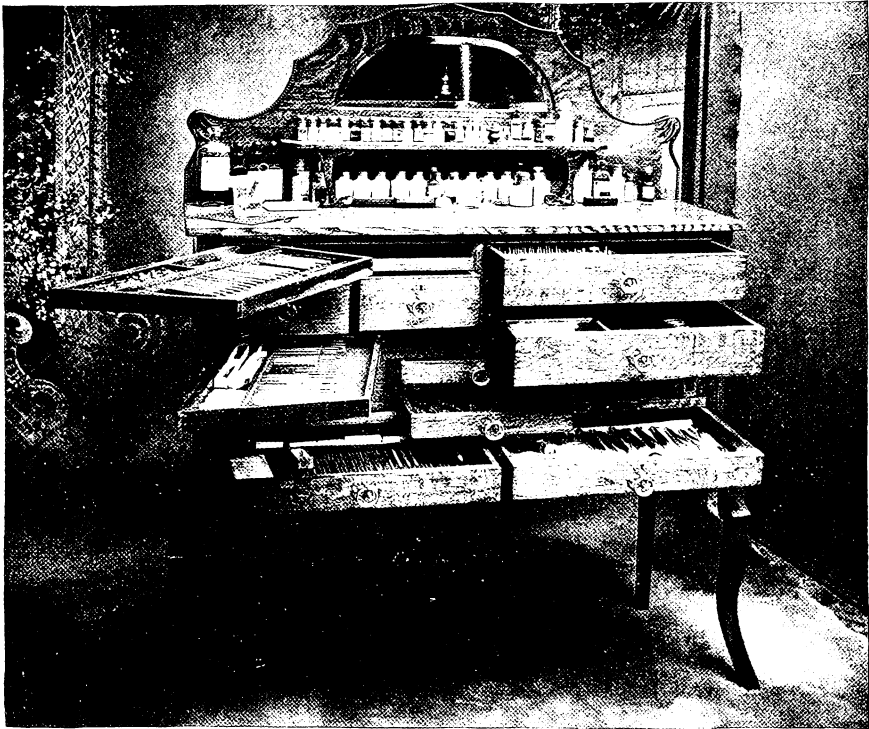
The floor around the chair is covered with corrugated rubber, and for ease on the operator's feet and the muscles of his legs, it is invaluable.

The dental cabinet is designed after one which was planned by my friend, Dr. J. A. Cook, of Marion, O., and differs very materially from the majority of dental cabinets. The illustration of the front of the office shows a very good view of the cabinet, and the third illustration shows the cabinet when opened. The instrument drawers swing out so that

*Since writing the above the doctor has replaced the Dorit engine, seen in the illustration, with the electric.—Ed.

everything can be reached from the chair, even when the operator's left hand is engaged.

The cabinet might be made with a separate compartment for drugs, but I prefer to have them on the top of the case where they can be reached at a moment's notice. Another point which I like about it, is the large amount of room on the top. Instruments may be laid back when you are through with them, without their being in the way, and can be put away by the assistant after the operation.



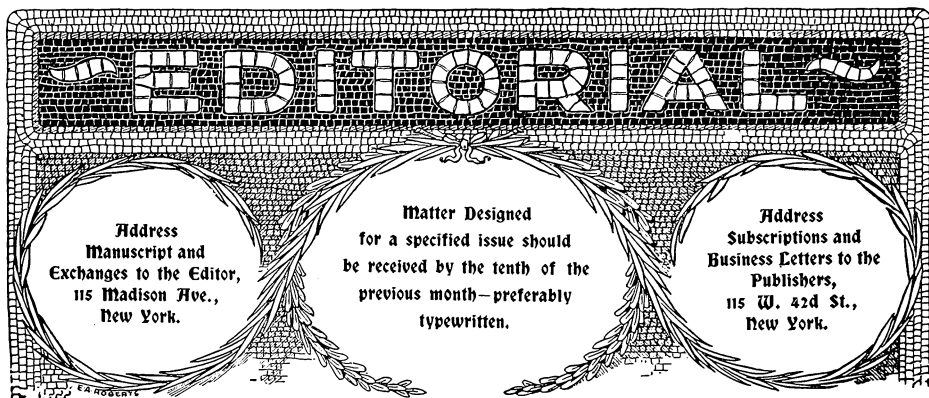
The cabinet is superior in convenience to any \$75 cabinet that I have ever seen, and can be put up at a very small expense. Mine is made of the finest quartered oak, with a beveled French plate mirror, and the drawers are lined with felt. The entire cost was only \$30.

The entrance to the toilet room can be seen to the right of the chair, between the book case and cabinet—a position which is convenient to both the patient and operator. In furnishing the room, it has been my especial care to give it a light and airy appearance, and I have avoided the massive, heavily upholstered furniture that is so much in vogue in many dental offices.

The latest illustrated magazines are always kept on the center table, for waiting patients and their friends, and everything possible is done to give the room a homelike and cheery appearance, and in that manner take away some of the feeling of dread that is always experienced upon entering a dental office.

While I have not been able to realize my ideal in my office, I think that I have to some extent idealized the real. I believe that any attempts which we may make in that direction, towards making the surroundings pleasant, will be appreciated by our patients, especially the ladies, to whom we must look for the greater share of our patronage.





Professional Advertising.

Professional advertising! Can there be such a thing? The question seems a paradox, and the first impulse tempts one to answer decidedly in the negative. Since professional men are prohibited from advertising, how can any advertising be professional?

In the January issue of this magazine there appeared an article in which Dr. William W. Belcher, of Rochester, ably discusses this subject, and it would seem that he thinks there is (or should be), professional advertising. In fact, he defines it, and draws the line at "a select weekly, or chuch publication." Furthermore, he limits the professional advertiser to the publication of his "name and address," and warns him not even to say "examinations free!" Could he say "examinations five dollars," and may he mention, in small type, that his business is dentistry? The doctor does not inform us.

But before further discussing professional advertising, let us inform ourselves what "advertising" is. The Standard dictionary, in which all definitions are excellent, tells us that to advertise, is: "To make known by a public notice; especially printed statements." And an advertisement is said to be "A public notice, statement, or announcement, usually printed (as in a newspaper, circular, poster, or handbill), giving information, stating a want or fact, or apprising of an intention, coming event, etc.; specifically a paid announcement in a newspaper or other public print."

Dr. Belcher thinks that a professional dentist may advertise in a church publication or select weekly, but adds later, "for heaven's sake keep out of theatre programmes, and daily papers." If the line is to be drawn so as to permit advertising, why draw it in such a peculiar place? Why may a dentist advertise in a weekly, and not in a daily? Perhaps because it is only one-seventh as bad. The doctor states as his reason, that the quacks use the daily papers. Then if the quacks wish to stop the professional man from advertising he need only send his illustrated advertisement to that select weekly, and the ethical men would, of course, be compelled to withdraw. They would have no medium left except the church publication. But why is an advertisement in a church publication righteous, and one in a theatre programme to be avoided? A prominent divine has recently declared that the power of the theatre for good is second only to that of the church, and he added that it might be even greater if properly directed, since people go to the theatre from choice, whereas very many attend church as a necessity.

Gentlemen! especially you who claim to be professional, and who call yourselves ethical examples, let us be honest. Let us be honest not only with others, but with ourselves. Let us preach and practice, or if we cannot practice let us cease to preach. Let us live up to the law, or cast the law aside. If we must have the law, the great law of ethics, the law set down in printed letters, let us seek out and obey the spirit of the law; let us not study the letters to find a way of transgressing without meeting punishment. The greatest disgrace to-day in the dental profession is not the real advertising man. We know what he is. He may be, and oftentimes he is, a quack, a fraud, a fakir, whatever you will, but at least he is not a hypocrite. The real disgrace within the profession, since the quacks are really not in the profession, are the hypocrites who preach ethics, and practice advertising.

Dr. Belcher is willing to permit advertising in church publications, and in weekly papers. He does not discuss the directory. How can one advertise in a directory? Well, it is one of the most insidious of schemes operated in metropolitan centres. The organizers know very well that professional men do not advertise, or at least avow that they do not. Yet they obtain the advertisements of these supposedly professional men,

some of whom know just what they are doing, while others perhaps are caught innocently.

**How Advertisements
of Ethical Men
are Obtained.**

To expose this scheme, here is a report of the manner in which a dentist was recently approached. A very gentlemanly young man called, and stated at once that he wished to get the dentist's name for a new directory. The conversation proceeded thus:

Agent—"This directory is to be placed only in the first-class hotels, such as the Waldorf-Astoria, Savoy, Holland House, and so on. In it we will give a list of the leading artists, physicians, lawyers, dentists, etc. Of course, we would like to have permission to put your name in the dental list."

Dentist—"Why, certainly. I have no objection."

Agent—"Then you will just please fill out this blank, stating your full name, address, office hours and consultation hours. Also, please mention any specialty, if you have one. The fee will be four dollars."

Dentist—"Four dollars? What is that for?"

Agent—"For the directory. We send you a copy of the directory, which will not be on sale, but goes only to the subscribers. This is the only manner in which you can get the book, which is well worth the price, etc., etc., etc."

This, of course, is adroit, and, as has been said, some may be caught innocently. Especially when the agent next shows the list of subscribers. In this instance was found the names of prominent men, society members, society presidents even. A list of men that one would surely say were all ethical.

The dentist refused flatly to go in, stating as his reason that it is a sort of advertising. The agent stoutly denied this. Wishing to trap him the dentist asked quickly:

"Suppose I don't want your directory. Will you put my name in for nothing?"

"No," was the reply. "The fee without the book is two dollars."

"Just so," answered the dentist. "Two dollars for the book, and two dollars to have the wealthy visitors to the city informed that I am one of the leading dentists; that my office hours are from nine to five; that

my specialty is crown and bridge work, etc. Sounds like advertising to me. Good morning."

The agent turned to the list of physicians and pointed out names of men even more prominent than the dentists, but the answer was: "Some of those men have been innocently caught in your trap, and the others are hypocrites."

It may seem that this is drawing the line rather sharply, but how else can it be drawn? The question turns on whether it is advertising to merely have one's name in a list of dentists, in a directory. Let us consider this analytically. These men have reputations and position. They would be *ruined* by inserting an advertisement in a daily paper, aye or in a select weekly, or even in a church publication. They cannot afford to *seem* to advertise at all. Their patrons are the higher, more intelligent class, who have money in plenty, and who would not dream of going to "an advertising dentist," synonymous in their minds with a quack. These people stop at the Waldorf-Astoria, the Savoy, the Holland House, at just those hotels where this directory is to be placed. And what do they learn from the directory? They *think* they learn the names of those persons, who, by reputation in the community at large, are the leading men. They do not understand that these men paid four dollars each to have their names in the list. They do not know that though many of the leading men have been "persuaded" to permit their names to go in (at the rate of two dollars for the book, and two more with the permission), others who are far from being leaders, have been accepted on the same terms.

The gentlemen who have gone into this directory scheme, may cry out, "You are quibbling!" Would they permit the use of their names in that directory if at the top of the list appeared the words: "Dentists may have their names printed in this column at four dollars per annum."

Our attention has been called to the advertisement of certain dentists, members in good standing of a State Society, who have gone further in this matter of directory advertising. Their names appear at the top of every alternate page in the book, in large black letters, and on each page, at the side of the names, appear such statements as: "Continuous gum work a specialty," "Dentistry in all its branches, and work guaranteed." Of course, this is advertising, without any quibbling. The case is cited,

EDITORIAL

merely to prove that such things can be without bringing down censure; that such men may pose in dental societies, and practice dentistry on business principles.

In the Department of Correspondence, in this issue, will be found a letter signed by Dr. Winfrey, which deals with this same subject in a pertinent manner. He tells us some salient truths. If the college advertises, why should not the student? The advertisements of a Pittsburg college to which he alludes were exposed in this magazine some months ago.

Why Professional Men Should Not Advertise.

In closing, it will be pertinent to reply to the oft-repeated question: "Why is it wrong for a professional man to advertise?" Advertising by men of commerce is entirely different to advertising by dentists, lawyers, or physicians. The shoe dealer advertises better or cheaper shoes than his neighbor; the hatter claims to have better hats; the clothier, better clothing; the theatrical manager, better plays; the race track associations, better races; the steamboat owners, better excursions, etc. But the dentist, if he advertises, *claims that he himself is better than his neighbor*. In other words, and in plain, simple English, he brags about himself, while the merchant brags about his wares.

If dentistry is to be fraternal, such bragging cannot be permitted. There is but one line to draw, if any, and that line should exclude advertising absolutely and entirely.

To revert again to that directory which is to be placed in the large hotels. Let us raise again the question whether it is right or wrong to insert one's name in such a place, especially to pay for the privilege. All those who attack our code invariably bring the charge that, as Dr. Belcher himself expresses it: "What would be advertising for him (the young practitioner) is ethical to the big fellow with a reputation." It therefore becomes the duty of the "big fellows," if they really are big fellows and have the best interests of the profession more in mind than their own advancement, that they so conduct their practice that no suspicion of advertising may arise against them. The directory of "leading dentists" is something more than suspicious.

Dr. Fillebrown, president of the National Association, writes that

as yet the National Association has adopted no code of ethics. He sends a copy of the constitution and by-laws, however, and in the by-laws appears this rule: "It is unprofessional to use on cards or signs anything except the name, title and address."

That rule is rigid enough. That rule would not even permit a man to state office hours, or to mention his specialty. Is it presumable that the committeemen who formulated that rule would tolerate the directory scheme? It might be interesting to have them express themselves on this point—interesting certainly to the leading dentists whose names will appear in the directory in the Waldorf-Astoria, Savoy and Holland House.

The president declares that the National Association has not yet adopted any code of ethics. Perhaps it would be best not to adopt any. Perhaps it would be best to become more liberal and to leave men to their own consciences. But if we must have a code, it will not suffice to refuse admission to our ethical circle to those who have publicly advertised; we ought also to punish the private advertisers. Above all, let us be honest. Let us cease to pose as better than we are.



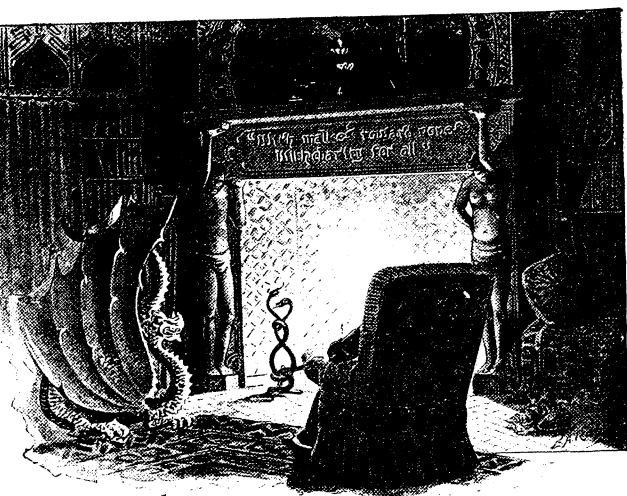
The Editor's Corner.

With the last issue of this magazine we had an experience which should teach the dental societies which have passed resolutions criticis-

ing the business management of dental journals, that the intricacies of our postal laws are difficult of elucidation, and this knowledge should deter other societies from the hasty adoption of resolutions which, however well they may read, if obeyed are likely to bring the publishers into constant conflict with the officials of the post office. Would it not be a good idea for dentists to confine their society work to dentistry and leave business management to business men?

Peculiarities of the Postal Laws.

In our December issue there appeared a page scored so that it could be torn out of the book. In the January issues of nearly all the medical and dental magazines which come to us in exchange, there were similar pages, blank subscription applications, all of which had evidently been passed through the post offices at the various cities where published. The most interesting point cited above is that the New York post office passed our December issue without question. We have, of course, a copy of the postal laws, in which we find no law prohibiting the insertion of a page scored to be removed. Neither had we received any notification from the postal authorities that any such law exists. It seemed entirely within our right therefore to insert the blank petitions to Congress, scored for ready removal, and they were bound with the book. The entire issue was taken to the post office, whereupon the agent after examining the sample copy, which must be presented each month, declined to receive the magazine as second class matter, declaring that a law prohibits the placing of a "scored" page in periodicals admitted to second class rates. He could not show us a copy of the law in the published postal guide, but merely had a private



copy of it pasted in his own book of instructions. Moreover he declared that the rule is an old one. An appeal to Washington delayed the magazine two or three days longer, the decision finally being that all the "scored" pages must be removed before the magazine could be mailed. Thus the willingness of the publishers to allow the magazine to be used in furthering a project of the profession of this country, caused not only a delay of more than a week in mailing the magazine, but necessitated the separate mailing of the petitions and a circular letter of explanation to the ten thousand subscribers in the United States. In addition to this it was necessary to remove all of the magazines from their envelopes, and take out the petitions, this work applying to the foreign as well as to the domestic edition.

It was pointed out to the postal agent, that as he had passed the December issue, we had a right to believe that the inserted page was legal, and that it was an injustice to stop our magazine and cause the additional work and expense which would be entailed, and we urged that the January issue might be passed, and the law be enforced in the future. The reply was brief.

"That is the law. You must comply with it."

Two thousand dentists have already signed the appeal to Congress in the matter of amending the patent laws. With these signed petitions over nine hundred letters of approval have been received. It is manifest therefore that the writers should be will-

ing to accept a general acknowledgment of their courtesy and moral support as here expressed, and it is hoped that they will not expect special letters of reply. Among all these letters only three have been received which adversely criticise the movement and two of these are from men who evidently do not comprehend our purpose. The following letter from Dr. R. Henry Hodgen, of Lexington, Ky., shows that misconception may be possible. He writes:

Dear Doctor—Upon receipt of a copy of a blank petition favoring an amendment to the patent laws of the U. S., and upon hastily glancing over its contents, I at first was opposed to the amendment, thinking that it was intended to forever abrogate the mechanical geniuses from the right (now given them by the present law) of protecting, by means of a patent, some invention upon which much time, research and money may have been spent. I therefore determined to send a petition to the Senators and Representatives from this district opposing the amendment.

However, I am very glad that I did not act upon my first impulse, as upon closer examination of the proposed amendment I clearly saw that the enactment of the measure would be one of justice to all. I therefore

take great pleasure in enclosing the petition with my signature, favoring the amendment.

It may be that many others have made the same mistake, and have hesitated to sign the petition, believing that our amendment would be a restriction put upon the faculty of invention. Nothing is further from our thoughts. The actual situation may be tersely put. The Dental Protective Association was organized to protect dentists from the exactions of persons who held patents which were illegal. The Association has fought and defeated many illegal patents. The Association never could have interfered with a legal and proper patent.

Our amendment asks that in future the patent office be restricted from granting illegal patents; patents which are broken as soon as tested in a court of law.

If such illegal patents are not granted, it will cease to be necessary for dentists either to submit to the payment of royalties, or to fight the patents in courts of law. And why should patents be granted, which cannot be sustained in court? Why should the dentists assume the expense of proving invalid, that which never should have been granted?

The amendment has been carefully worded, but it must be remembered that when introduced into Congress, before it can become a law it must be referred to the Congressional Committee on Patents, and by them declared to be a just enactment. That would mean that legal experts agree with our contention and approve the amendment as just and equitable to all the people. Consequently, at least, this much vexed question will be finally tested by men trained to understand the requirements of patent legislation. There should therefore be no hesitation to sign the petition, as a means of settling this long dispute finally. It is hoped that all who have not yet signed the petition will do so immediately, and mail the same to this office. It may be interesting to note that every physician who is a subscriber to *ITEMS OF INTEREST*, has already signed the petition.

**Why Canadians
Should Sign the
Petition.**

We mailed the blank petitions to our Canadian readers, but only a few have thus far signed and returned them. Several of those who have, write in effect: "I sign the petition as a means of showing my interest in the movement, but of course the signatures of Canadians can have no influence upon your Congress, and the success of your movement cannot help Canadians."

This is an error. Let the Canadians stop a moment and think. Were they in any way the sufferers from the Rubber Company or from the Tooth Crown Company, which by the way called itself "International?" Were not the patents of these companies first taken in the United States?

Did not the iniquity begin here? Are there not a hundred times as many dentists in this country as in Canada, and therefore is it not more likely that some future troublesome patent would originate here? If the patent is obtained here, will it not be easier to obtain one also in Canada? If not obtainable here would it not be more difficult, especially for an American, to obtain protection for his scheme in Canada? With a restricted field of operation will not such schemes be less alluring? If the amendment is passed in our country will it not be a precedent for Canada to imitate?

Let the Canadians sign the petitions, and they will be delivered to Congress as an indorsement from our neighbors across the line; it will be pointed out that the line is merely geographical; that there are no dividing lines in science. Dental science is for all the world, and a restriction of scientific progress is a hindrance to the whole scientific brotherhood. By all means let our Canadian friends give this movement their moral support, even though they cannot effect political action.

Innumerable letters reach this office asking, "is it just that a legal practitioner of one State should be unable to practice in another?" Of course theoretically it is not. But this seeming injustice is a logical sequence of our very peculiar political system of government. We of the new world, have carried the theory of home rule to such an extreme that it may be said that we must remain at home if we desire to rule or be ruled in accordance with our own laws. This country is truly a nation only in times of war, when the passions of the men amongst us make us all strive for the same goal, regardless of State lines. In times of peace we are but citizens of individual States, and when we leave our State, we are homeless wanderers. The conflict between the several State dental laws, and the resulting hardships therefrom, are quite analagous to the conditions arising from the many State laws regulating divorce.

Two citizens of New York may agree to assume a matrimonial co-partnership. The woman commits no act against the statutes of the State in which she lives, and in which she was married, yet her husband may leave her, cross into New Jersey, take up a habitation real or nominal for a stated period, and obtain a divorce. The State of New Jersey thus interferes in the holiest rights of a person, the wife, who is not a citizen of New Jersey, and not properly within the jurisdiction of the Court granting the decree against her. The position of the husband is equally anomalous. He is free in New Jersey and may take another wife. Let us suppose that he does so, the second wife being left in ignorance of his previous marriage. Some day he takes his bride to New York, perhaps

to witness a theatrical performance. He is arrested on a charge of bigamy, and as his New Jersey divorce is ineffectual in New York State, he is easily proven guilty and sent to prison. Thus the State of New York legally destroys the honor and happiness of the second wife, not a citizen of New York and not under the jurisdiction of the Court which disgraces her.

All this is cited to show that the dental law tangle is not unique; yet it appears possible that a remedy is more easily found than in the divorce laws. There is little hope that a uniform dental law can be introduced and successfully adopted in all the States of the Union. Even if the dental profession should agree upon a statute which they would like to see common in all States, the desire would be unobtainable because in passing through the various legislatures they would surely be variously amended so that in the end they would be dissimilar.

Here however is a perfectly feasible plan, which will attain the end without further legislation. At the present time many of the State Examining Boards have united to form the National Association of Dental Examiners. This Examiners Association has no legal power in the several States, except as each State may decide to follow a line of conduct planned by the national body.

First: Let the National Examiners Association appoint a committee whose duty it shall be each year to prepare a set of examination papers, for the written examination of candidates for State license, and also let them formulate a method of examining as to practical ability.

Second: Copies of these papers, with explanation of the standards for practical examination, should be forwarded by this committee to each State Board, which is a member of the Association, and possibly to others also.

Third: Let each State Board elect to adopt this suggestion of the National Association, and examine candidates in accordance with the indicated standard.

Fourth: Should the candidate pass his examination and receive his license, a certified copy of his examination papers should be returned to him.

Fifth: The licensed practitioner of one State, desiring to practice in another, shall merely present the certified copy of his examination papers, and these papers shall be received and considered as in lieu of a new examination. It shall, however, rest with the Board of Examiners to decide, after examining the papers presented, whether he is rightfully entitled to a license, just the same as though the candidate should submit to a new examination.

In other words, the Board before which the licensed practitioner of another State shall present himself, shall have the right to review the action of the first Board, and all that the candidate gains is exemption from a second examination, provided, in the opinion of the second Board, he was justly licensed in the first instance.

As the present laws give the State Boards control over the examination of candidates, no new legislation would be required in thus effecting a recognition of the licentiates of other States, because the candidate would be accepted on his personal record, and not upon the judgment merely of the Board of another State.

This plan has been fully explained to several members of the National Association of Dental Examiners, and they have promised to urge its adoption at the next annual meeting of the Association. If this be done, then professional men may move from one State to another as easily as do the quacks at present.

**Sharpening
Hypodermic
Needles.**

Dr. Frederick B. Spooner, of Brooklyn, makes the following practical suggestion: "To sharpen the points of hypodermic needles, when the cleansing wire is in the point, sharpen on a fine corundum stone in the dental engine. The wire will be ground at the same time and prevent a bur being turned inward, closing the aperture, because after grinding, the wire may be pushed through, carrying with it any slight bur that may be present."

**Cleanse
the Teeth Before
Inserting Fillings**

Dr. Garrett Newkirk, of Chicago, writes to us as follows: "I note that a writer in your January issue advises the cleansing of the teeth to be included in the rubber dam, before operations are begun. In addition however to mere rubbing with bibulous paper, let me suggest the use always of alcohol, and sometimes pumice powder. It is my belief that the teeth should never be filled without first thoroughly cleansing all surfaces in the vicinity of the cavities."

**Method of
Extracting One's
Own Teeth.**

"Did you hear about my friend Bill?" said a trainman. "Well, that fellow has made me laugh more times than once. Not long ago Bill got a jumping toothache. He wants to have that tooth out, but he don't want to pay the money, nor he ain't got the nerve to have the thing done. All the same, that tooth is keeping him up at night, and Bill, he almost goes wild. 'Either me or that tooth,' says Bill, 'one or the other; I ain't going to stand this sort of life.' All the same, when Bill starts to go to the dentist his knees begin to bend and he is so scared that the tooth stops aching, but when he turns back and reaches the house the tooth is plaguing him again."

"Now, Bill thinks of a great scheme. What does he do but buy a piece of strong string, say, you know this kind of silk thread, and he waxes that and ties it to his tooth, so tight that it can't come off. Then Bill walks down to the railroad station. You see, it was his idea to tie the string to a freight car, and then, when the train started it would jerk the measly tooth out. He finds the freight and ties the string to the coupler of the car, and stands around to wait until the train starts. Well, sir, he begins to feel chilly about the gills. The more he thinks of the time when the train is going to move the worse he feels. Every time the whistle blows he jumps. 'Well, I guess I'd better untie,' thinks Bill, 'and come again another day;' but when he goes to loosen the string he finds it's no go, and he can't jerk the thing loose because the other end is on the tooth. Well, sir, that train begins to start, and Bill he doesn't have the nerve to stand back, so he just trots on behind, like a little pup on the end of a chain. 'Where are you going, Bill?' hollers a feller; 'you seem to be in a hurry.' Well, sir, Bill starts to swear like mad, but the train is beginning to go a little faster, and he has to commence to lope like a jack rabbit. You see, the train had been going through the city, but now it started to get outside. Bill didn't have the nerve to stand still, so he just humped himself after that train like it was something he wanted bad. 'Say, mister, why are you running that way?' asked a brakeman, who got onto the thing. Of course, that sort of a guy made Bill madder than ever, but he had to lope on.

"Luckily for Bill the train had to slow up for a crossing, and while it stopped he borrowed a knife and cut the string."—*Topeka State Journal*.

**Usefulness of
Carborundum
Disks**

Leaming's "Vulcan" Carborundum Disks are the best tools I have found for cutting off portions of teeth preparatory to crowning. The anterior teeth can be sawed off at right angle to long axis of tooth, molars can be closely ground on morsal surface and remaining portion between grooves easily broken down with chisels, thus saving much disagreeable grinding.—*American Dental Weekly*.



CORRESPONDENCE

Prevention of Caries.

DEAR DR. OTTOLENGUI :

I have just finished reading Dr. A. C. Hart's paper in the November issue of your magazine, and there is so much of interest suggested by this reading that I cannot refrain from writing you a few lines while the mood is upon me.

Some of Dr. Hart's speculations will hardly stand the test of scientific examination. It is, of course, true that many germicides unite with certain elements of the tissue forming new compounds, which, in some instances, undoubtedly withstand, to an extent, the action of micro-organisms. But it is, I believe, pretty well known that germicides are chiefly of value because they actually destroy the micro-organism.

We must continue to reiterate that the chief factor in the liability of teeth to decay is not to be found in a greater or less degree of hardness. For the sake of quickly reaching the point, let us admit that there is a great difference in the hardness of teeth. Now, it only needs a few simple experiments, which can be made by anyone, to show that the hardest tooth obtainable yields quite rapidly to the action of lactic acid. If, therefore, we have lactic-acid-producing bacteria attached to the enamel of a tooth, the enamel at that point *must be destroyed*. It is, you see, a simple chemical problem. But, there is a factor in the problem which is largely unknown, and that is the exact condition or conditions under which these micro-organisms become virulent acid formers.

Some of the same forms of bacteria which are destructive in human mouths, are found in the mouths of animals where they appear to be harmless. The proof that this harmlessness is not due to tooth structure may be found in the fact that if the animal tooth be inserted in the human mouth, it decays just as the human teeth do. The reason, therefore, why certain substances, like nitrate of silver, for instance, preserve the teeth from decay is not primarily due, I believe, to any hardening action which they possess, but because they produce, temporarily at least, a condition of the tissue inimical to the existence of the micro-organisms at that point.

It is true, however, as I pointed out in the paper on "Pathology of Enamel," read before the Odontological Society, that the most serious defects in enamel structure are due to deficiency of cement substance. The use of germicides would, of course, have the tendency to remedy such defects.

But when it comes to the practical part of Dr. Hart's paper, I can give it my most cordial and earnest endorsement. I have repeatedly pointed out that, in my judgment, the greatest hope for the future in the saving of human teeth lies in the direction of prevention of decay by the use of germicides. In my own practice, I have relied chiefly upon a strong solution of hydronapthal in oil of cassia. This I use freely in all cavities, and then, before filling, I use a varnish of Canada balsam in chloroform in which there is ten per cent. of hydronapthal. My patients use a dentifrice in which hydronapthal and oil of cassia are the principal germicides. With patients who use this freely and faithfully, the results have often been astonishing. Decay in many instances has been almost entirely arrested. I am, I believe, speaking with all due caution when I say that in my judgment, two-thirds of the decay of teeth now going on is preventible.

Dr. Hart's paper will lead me, as it should lead every dentist, to make thorough trial of pyrozone and formalin as he recommends. If the results are better than I have already achieved with hydronapthal, I shall report in due time. I am, dear sir, yours faithfully,

J. LEON WILLIAMS.

London, England, Dec. 20, 1897.

Colleges Which Advertise.

Editor ITEMS OF INTEREST:

It was with great interest that I read both your article and that of Mr. Stanton Palmer on the subject of ethics. I have been in the practice of dentistry for several years and have necessarily made certain observations. I would like to express my views through the columns of your journal and perhaps some brother dentist will show me where I err. Mr. Palmer in his article speaks of the Little Fellow and the Big Fellow. You easily make him a reply as *you* look at the subject, for you, yourself, are one of the Big Fellows. I am one of the Little Fellows and have of course looked at the question a little differently. You say in your editorial that he can advertise if he wishes, the only penalty is that of

being declared "Unprofessional," and of being excluded from the dental societies. I was in Pittsburg, Pa., this year, at the time of the opening of the Dental College, and I read in the newspapers among the "Wants, Lost, etc.," the advertisement of the Pittsburg Dental College. We are taught in all our lessons of life by precept and example of which the greater is the example. Now, this college advertises in this manner:

"Wanted. You to bring this with you and secure ten per cent. discount on dental work done at Pittsburg Dental College, 711 Penn Ave."

"Personal. First ten days of October special rates on all dental work at Pittsburg Dental College, 711 Penn Ave."

The Dean of this college poses as one of the most ethical of men. Now, the gentleman who operates the largest advertising office in that city advertises in an extensive manner and the "ads" of the college were not even original, but were gotten up in imitation of this gentleman's and evidently written by a gentleman who had read them.

Suppose a young man attends a college and graduates and then locates in the same city? What has he to contend with not counting the advertising offices? Why an advertising college. They advertise a corps of well equipped students under the supervision of an expert demonstrator. The college must of course furnish people for the practice of the students and they *claim* to get these from the ranks of the very poor who are unable to patronize a first-class dentist. The *fact* is that their prices are just about the same as in the advertising offices. The average gold crown weighs twelve grs., and then they charge a patient three or four dollars, *cost price* (?). The result of this is, and I can vouch for it from personal observation, that the well-to-do middle class in the cities, living on an income of from \$1,000 to \$1,500 a year, patronize these colleges. The student is as a rule an educated man who can converse with refined people, and when a lady or gentleman goes to the college he wins their confidence, holds their patronage and that of their friends in turn. The patrons of the college are yearly getting to be higher in the social scale. All this time, what is our ethical graduate to do? He must charge \$10, \$12, \$15, or whatever the price may be, for the same crown which two months before he made for four dollars, or less. Can he hold the patronage at the price? Certainly not. He is too high priced. He has no new patrons, or comparatively none. What must he do? The college advertises and he must not or else he will lose the respect of the Faculty, *who are advertising and making money out of the work done in the college*. I attended a college in a Southern city during one term (they, too, advertised prices, etc.), and then at the advice of the Dean, began to practice, this at that time being permissible under that State's laws. I must after a five month's schooling start in business and charge the same price as

men of long experience. To leave ethics out of the question, would this be honest? My work could not compare with theirs. I soon found that my work was not good enough, and I then wrote to the secretary of the State Board, with whom I was acquainted, asking him for either a position, or his influence to secure one. He, through the Dental Depot secured me a position in an advertising office, where I worked for some time, and where I learned from the others employed there. I afterwards took my second course at the same college, where the head demonstrator was fresh from a Chicago advertising office, of which he had been manager, and the assistant demonstrator had been a workman in the same office. The head demonstrator was one of the finest workmen it has ever been my pleasure to meet, yet he gained his skill in that advertising office, being a man so illiterate and ignorant of social duties that he has been held up in derision by the State Dental Association, of which he is now a member.

A young man can spend his money and three years of study and then he must enter upon a struggle for mere existence for several years, at least, if he adheres strictly to the Code. On the other hand, he can go to an advertising office—and here let me say that I have worked in several cities widely scattered and in all so far I have found that they pay good salaries, but only to first-class workmen, and they will employ no other knowingly, except as assistants who want to learn—he can work in an advertising office until he is a first-class workman. He can then attend college by taking a demonstratorship and drawing a fair salary there, until he graduates, when he is taken in the office of one of the Faculty who may be getting old but has a reputation, and he is now one of your most ethical men. I saw an article in your journal in which one gentleman said he had started in practice by advertising, but that having secured a lucrative practice he had stopped, as he would lay aside a crutch when health was restored.

Is not this a more honest and manly way to become ethical? When a man first begins practice and of course is inferior, why is it not right that he should advertise cheaper prices? His work is worthless until he secures both experience and practice. Yours truly,

CLINT WINFREY, D.D.S.



Reply to Dr. Burchard.

Editor ITEMS OF INTEREST.

Dear Sir:—In the November issue of the *ITEMS OF INTEREST*, there appeared an article under the head of correspondence from H. H. Burchard, of Philadelphia, Pa., in which he in a round-about way accuses the National Association of Dental Examiners of duplicity, ignorance, incompetence, etc. The attack was wholly unwarranted and unkind. But for the fact that H. H. Burchard is a professor in a dental college, and has compiled a work on Pathology and Therapeutics, and has written a few pages* in another work now being offered to the profession, what he has to say in his article (which is remarkable for the use of the personal pronoun I,** this pronoun appearing in a page and a half, fourteen times) would not be worthy of a reply from the humblest member of the National Association of Dental Examiners. However, a man who, of necessity, must have some information in view of the foregoing, is expected to be possessed of some regard for the feelings of other men and some regard for the statements which he makes. Dr. Burchard speaks of covert threats and self-made rules, of impertinent dictations, of self-elected bodies in a very flippant manner. If he refers to the letter sent out to College Deans by the Committee on Colleges, of the National Association of Dental Examiners, he shows that he is either ignorant of the text of this letter or he is wilfully misrepresenting the committee. What does the doctor mean by self-elected bodies? Does he mean that the National Association of Dental Examiners elected themselves? It is a well-known fact that the Examining Boards send representatives to the National Association, and that the Examining Boards are in nearly every instance appointed by the Governors of the various States. This being the case, in what sense then is the National Association a self-elected body?

I have read the circular letter mailed to College Deans and emphatically deny that it contains a sentence that in any way is an impertinent dictation as to the college curriculum. The author of that communication states positively "that the Committee on Colleges is required to reconstruct for the convenience of the various State Boards, a list of the colleges recognized by this association." Can anything be plainer

* Dr. Burchard's contributions in the American Text Books of Dentistry cover 350 octavo pages, and if published separately would make a very respectable volume.—*Editor*.

** Dr. Burchard's letter was not intended for publication when written, but was a private personal communication, which later he consented to see in print. This explains the prevalence of the personal pronoun, which is not commonly observable in the doctors' published writings. Furthermore, the avoidance of the use of the word "I" is mere faddishness, and mock modesty belonging to a style rapidly falling out of fashion.—*Editor*.

than that statement? For the convenience of the various State Boards certain information is requested to be furnished. The colleges can furnish this information or not as they see fit. The National Association can recognize or refuse to recognize as it chooses. Now, are not both parties free to act as they desire? He says, "I have heard in our societies much indignation expressed at this hysterical outburst of these examiners." By whom? I would like to inquire. If there were ever any more hysterical outbursts of passion and temper than have appeared in several journals from the pens of college professors during the past year, I have yet to see them. Hysterical antics are not entirely confined to the National Association of Dental Examiners.

**Competitive
Examinations
for Examiners.**

Competitive examinations for individuals that conduct the State examinations are proposed by the doctor (a novel idea, indeed). Will the doctor inform us whether the professors will conduct this examination, or whether the boards or the profession at large will do this examining? We will suppose that the professors will do it. They are competent to perform the task. But some of the professors might be called in question by the profession as to ability as successful operators and teachers. Would it not be well for the profession to meet *en masse* and nominate a corps of professors of known ability, then have a competitive examination for the professorships in the colleges, and after this do away with Examining Board? "There are individuals conducting State examinations" who would be glad to be relieved from the honorable position.

**Illiteracy of
Examiners.**

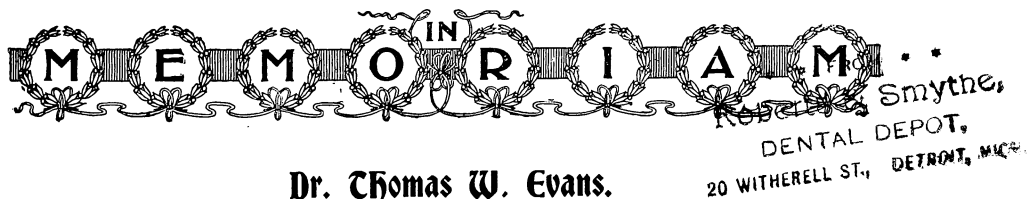
Illiterate examiners "who cannot pass a successful examination in elementary chemistry, normal histology, general and special" are found, and frequently they have D.D.S. or M.D. or D.M.D. to their names. How did they get these degrees? Has Dr. Burchard ever signed diplomas and placed them in the hands of such persons, knowing their incompetency and ignorance? If so, his mouth is closed and his tongue paralyzed in condemning one such or all such, unless he confesses his sins and repents. No one who is at all well informed will take issue with the doctor when he says, "no one who writes as a schoolboy and could not pass a ninety per cent. examination, should act as an examiner," etc. Now, Doctor, should such persons have the degree of M.D. or D.D.S. conferred on them? To ask the question is to answer it. The profession is well aware that degrees are conferred on such individuals by dental colleges. Will the doctor maintain that professors who examine students for degrees are so well informed that they do not find it necessary to

study the subjects which they teach? Mr. Editor, "you know, we know, and the profession knows" better than this. No man is fit to be an examiner or professor who does not study and "look up" his subject, and the oftener, the better prepared he is to act in either capacity. The unwarranted attack he makes on the ability of the examiners to conduct successfully a practice is a boomerang. If he will take the pains to examine into the facts, he will find that a majority of the examiners are college men. Now, we, "the examiners," have been examined by the professors and they have had an opportunity to publish the results. Dr. Burchard says, "No one has a keener appreciation of higher education, for I worked for it last winter until I broke down entirely," etc. We commend the doctor for his desire to put the profession on a higher plane, and bid him Godspeed. We will not impugn his motives, be they mercenary or beneficent. Neither do we desire to be a carping "captious critic." All we ask of the doctor is that he be willing to "do unto others as he would have others do unto him." Now, Doctor, the colleges and Examining Boards are separate and independent institutions, each having their own work and owing a debt to the public. The colleges claim to be able to attend to their affairs (nor have the examiners asked them to change their policy one iota), and the examiners claim and demand the same right. The several State Boards operate under the laws of their States, and their decisions in passing upon the merits or demerits of candidates coming before them, are final. Now, if these boards are bound together by a representative body, such as the National Association of Dental Examiners, for protection against spurious diplomas and disreputable practitioners, who has authority to denominate their rules dictatorial, and their actions hysterical antics?

H. W. CAMPBELL.

Suffolk, Va.





Dr. Thomas W. Evans.

Resolutions by American Dental Club of Paris.

At a special meeting of the "American Dental Club of Paris," held at the office of its President, Dr. G. C. Daboll, on Saturday evening, December 11, 1897, the following resolutions were unanimously adopted:

Whereas, By the sudden death of Thomas W. Evans, M.D., D.D.S., Ph.D., which occurred at his home in Paris, Sunday evening, November 14, 1897, this club loses one of its most assiduous members, and our profession one of the most remarkable men that has ever graced its ranks, therefore be it

Resolved, That the "American Dental Club of Paris" deeply deplores the death of so eminent a colleague, who, as its first president, and as a fellow member ever alert to the interests of the club and the profession, always commanded the profound respect of all.

Resolved, That we as a body of American dentists, whose lot by various circumstances has fallen in a foreign land, while gratefully acknowledging the hospitality of our sister republic and our gracious adoption by her people, feel it but just to acknowledge our gratitude to Dr. Evans, who, as one of the great pioneers of the dental profession, has done so much to break down old prejudices and prepare the way not only for us, but for every dentist whose heart is in his work, and whose object is to benefit mankind.

Resolved, That we regard his success in securing the recognition of all the nations of Europe, of the beneficence of dental science and art as first understood and practiced in America, as of the greatest importance to the public, as well as to the dental profession.

That influence was strongest during the first twenty-five years of his practice, during the plastic period of the evolution of dental science so especially active in America.

On account of his influence in the highest circles, the way has been made easier to convert conservative Europe to modern methods of conservative dentistry, and not only every member of this club and every American dentist of Europe, but every native dentist as well, has been benefitted by that influence, and we believe that above all, by the adoption of modern methods such a stimulus has been given to *all* dentists

of *all nationalities* as will one day render dental science a *universal* and not merely a *national* science, as it was during a great portion of Dr. Evans's career.

Resolved, That while we recognize the influence of others of his contemporaries, he played a principal rôle owing to the peculiar position brought by his unparalleled success,—such success being due to his personal magnetism, highmindedness, affability, practical common sense and tact.

Resolved, That this club regard the numberless honors conferred upon Dr. Evans by the various sovereigns of Europe, as the just tokens of appreciation of the dental profession through one of its great representatives, and it is proud that he was an American, and proud he was a member of this club.

And, notwithstanding his pecuniary success, his unlimited honors, and his long sojourn away from his native land, we know that while being faithful to his duties in foreign lands, his loyalty and affection for his own country never diminished.

He was first, last and always a dentist and proud to be considered one, and despised that "*Snobism*" which makes some men ashamed of the profession to which they owe all their success in life.

Resolved, That we believe the name of Dr. Thomas W. Evans deserves a place with other great names in the history of the development of dental science.

Resolved, That our sympathy be extended to the relatives and friends of Dr. Evans; that a copy of these resolutions be handed them, and that a full record be made and preserved by the secretary of the club in its procedures, and that a copy be sent to the dental journals of America for publication.

Resolved, That as a token of respect to our late confrère, the "American Dental Club of Paris" join in a body to attend his funeral.

JOHN W. CRANE.

ISAAC B. DAVENPORT.

J. H. SPAULDING.

Committee.



Dr. J. W. Plummer.

Dr. J. W. Plummer died in Norfolk, Nebraska, August 5, 1897, of apoplexy and heart failure in the fifty-eighth year of his age.

Dr. Plummer was born in Ohio. He studied dentistry, and was for a period of several years associated in the dental office of Dr. Forbes, of St. Louis, Mo. After severing his connection with Dr. Forbes, he engaged in practice at Fulton, Mo. There with his wife he remained until about the year 1881. He removed to Loup City, Neb., remaining there until the summer of 1894, when he removed to Norfolk, Neb., and associated himself in the office of Dr. H. L. Scoggin. At the expiration of a year's successful practice with the aforesaid associate, he withdrew his interests and opened an office by himself where he enjoyed a share of the patronage up to the time of his death.

Dr. Plummer has been an active member of the State Dental Society for several years, having read a paper on "Practical Dentistry" at the last meeting in May. He was also a contributor to the dental journals.

He was a man who was loved and respected by all. He was a member and elder of the Presbyterian Church of this place, and superintendent of the Sunday school at the time of his death.

The entire fraternity will join in extending to the surviving widow our heartfelt sympathy.

Dr. William B. Van Vleck.

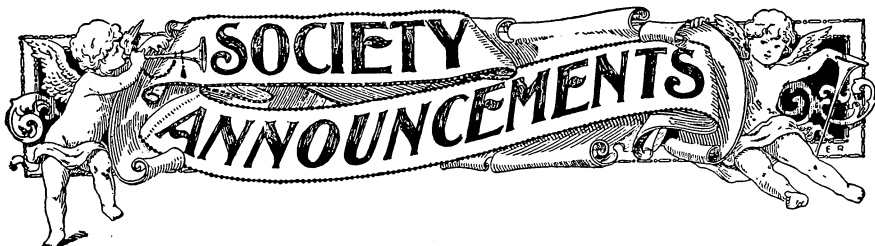
Dr. William B. Van Vleck, vice-president of the New York State Dental Society, died at his residence, 536 Warren street, Hudson, New York, on January 14, 1898. He was the seventh son of Henry and Elizabeth Pruyn Van Vleck and survived them all. Born in Kinderhook on the 13th of November, 1818, he went to Hudson at the age of twenty-one. After pursuing the study of his chosen profession, dentistry, for some time in Hudson with his brother, Henry H. Van Vleck, he removed to New York, where for a year and a half he was a student under the late Harvey Bedell. He then returned to Hudson, where he spent the rest of his life, following for over half a century the duties of his profession.

In March, 1853, he married Anna King, of Hudson, the daughter of the late Captain Charles F. King, who survives him. Four sons were born to them—Dr. Charles K. Van Vleck, of Hudson; Fred S. Van Vleck, of Brooklyn; Harry D. Van Vleck (who was a resident of Hudson till the time of his death, over three years ago), and William J. Van Vleck, of New York.

Dr. Van Vleck was one of the organizers of the District Dental Society, and never lost interest in its welfare. He was elected vice-president of the New York State Society in 1896, and was unanimously re-elected at the last meeting in 1897. He practiced in Hudson, but was well known throughout the State, and always ranked among the leaders in his life's work. His son, Dr. Charles K. Van Vleck, was associated with him in the latter days of his active work, and about eight years ago ill health compelled him to abandon the profession he had followed so long and so faithfully.

Political honors did not appeal to him. The pleasures of public life could not overcome his love of home. Of a retiring nature, he often refused offers of public positions, and sought his family and friends. Old in years he was young at heart, and the last days of his life saw no change in his kindly nature. His circle of friends was large, and though he had exceeded the allotted three score years and ten, he did not allow increasing age to interfere with the friendships formed in other days. He was of the old school; ever the genial gentleman, and to them there are no successors.





Southern Dental Association.

The next meeting of the Southern Dental Association (as a branch of the National Dental Association) will convene in St. Augustine, Fla., Feb. 22 to Feb. 25, 1898.

The president and officers of the association have been actively at work for the past few months and have met with gratifying encouragement. This being the most delightful season of the year to visit Florida and the quaint and historic city of St. Augustine, we predict that this will be one of the most largely attended and profitable meetings during the history of the Southern.

S. W. FOSTER, Rec. Secy.

Atlanta, Ga.

Northern Iowa Dental Society.

At the meeting of the Northern Iowa Dental Society, held at Mason City, September 7, 8 and 9, the following officers were elected for the ensuing year:

Dr. G. N. Beemer, president; Dr. A. N. Ferris, vice-president; Dr. G. H. Belding, treasurer; Dr. Wm. H. Steele, secretary.

WM. H. STEELE, Sec.

Forest City, Iowa.

Vermont State Board of Dental Examiners.

The Vermont State Board of Dental Examiners will meet 10 o'clock, A. M., on Wednesday, March 16, 1898, at Hotel Berwick, Rutland.

GEORGE F. CHENEY, Secretary.

St. Johnsbury, Vt.

New York State Society.

Appeal to Congress.

The petitions of our "Appeal to Congress" were mailed to dentists throughout the country two weeks ago, and already we have the signatures of two thousand dentists from all over this country. Of course it is impossible to give a list of these names at present, but it is of interest to report that the following, who may be looked upon as leaders in the profession, have promptly signed the blanks:

Dr. Thos. Fillebrown, President National Association.

Dr. E. P. Beadles, President Southern Section National Association.

Thus far signed petitions have been received from the different States as follows: Maine, 42; New Hampshire, 22; Vermont, 21; Massachusetts, 118; Rhode Island, 17; Connecticut, 30; New York, 346; New Jersey, 72; Pennsylvania, 196; Delaware, 4; Maryland, 23; Virginia, 24; West Virginia, 11; North Carolina, 22; South Carolina, 12; Georgia, 24; Florida, 8; Alabama, 18; Mississippi, 11; Louisiana, 18; Texas, 29; Ohio, 126; Kentucky, 40; Tennessee, 14; Indiana, 48; Illinois, 145; Michigan, 56; Wisconsin, 48; Minnesota, 38; Missouri, 59; Iowa, 98; Nebraska, 29; Kansas, 31; Arkansas, 9; North Dakota, 5; South Dakota, 3; Idaho, 7; Montana, 7; Wyoming, 2; Utah, 8; Colorado, 22; New Mexico, 1; Arizona, 5; Nevada, 1; Washington, 22; Oregon, 12; California, 88; Oklahoma, 1; Indian Territory, 1; District of Columbia, 10; Canada, 27. Total, 2,032. Districts and dental societies are urged to sign and return its blank petition as soon as possible. Blanks will be furnished if requested.

At the annual meeting of the Minnesota State Dental Association, held in September, 1897, the following committee was appointed: Dr. C. H. Robinson, Wabasha; Dr. G. V. I. Brown, Duluth; Dr. T. B. Hartzell, Minneapolis.

The Massachusetts State Dental Society, at its last annual meeting, appointed Dr. Waldo E. Boardman as a committee on the appeal to Congress.

The Maryland State Dental Association are in hearty accord with the movement and have appointed a committee to take charge of the matter in that State.

R. OTTOLENGUI,
Special Committee.